Heritage as climate strategy

Mains Syllabus: GS I - Indian Heritage and Culture.

Why in the News?

Significances of Indian heritage structures in climate adaptation have been recently emphasized.

What are the key features of India’s architectural heritage?

- India's architectural heritage is a vast and diverse tapestry, encompassing centuries of building traditions and cultural influences.

  India boasts 43 UNESCO World Heritage Sites, a blend of cultural and natural wonders.

- **Characters** - It's characterized by a blend of ancient styles, including rock-cut architecture like the Ajanta and Ellora Caves, along with monumental structures like the Taj Mahal and the Red Fort, reflecting the influence of various dynasties and rulers.
- **Rock-cut Architecture** - The Ajanta and Ellora Caves in Maharashtra are prime examples of intricate rock-cut temples and monasteries, showcasing Buddhist, Hindu, and Jain artistic traditions.
- **Temples** - Indian temples, Southern dravidian style, Northern vihara style, Vesara mixed style have unique characteristics reflecting regional influences and traditions.
    - In the Northern style, the sikhara (rising tower in the Hindu temples) remained the prominent feature whereas, in the Southern style, the Gopurams (huge gateways that form the enclosure of the temple complex) were the highlight.
    - The Kandariya Mahadev Temple, Khajuraho in Madhya Pradesh are examples of the Nagara Style of temple architecture.
    - The towering Gopurams and the extensive Mandapas (porches) of the famous Thanjavur temple in Tamil Nadu are some of the finest examples of the Dravidian style of Architecture.
- **Mughal Architecture** - The Taj Mahal in Agra and the Red Fort in Delhi are iconic examples of Mughal architecture, known for their symmetrical designs, marble facades, and blend of Islamic and Indian elements.
- **Forts and Palaces** - Forts like Agra Fort and the Red Fort, and palaces like Mysore Palace, showcase the grandeur and power of various ruling dynasties.
- **Indo-Saracenic Style** - During the British colonial period, the amalgamation of Indo-

Islamic and European styles resulted in the Indo-Saracenic style, seen in buildings like the Victoria Memorial in Kolkata.

What are the impacts of urbanization on heritage infrastructures?

- **Abandonment** - While newfound mobility and technology resulted in mega-cities with metros and automobiles, the medieval town, at its core, was often abandoned or subjected to densities far greater than it could absorb.
- **Loss of identity** - Rapid urban growth has been responsible for large-scale constructions at the cost of losing identity through the erasure of historic precincts.
- **Demolition and Encroachment** -Rapid urbanization often involves demolishing historical buildings and monuments to make way for new infrastructure, leading to the loss of cultural assets.
- **Environmental Deterioration** - Urbanization can increase pollution, which accelerates the deterioration of building materials and cultural artifacts.
- **Social Displacement** – Disruption in traditional ways of life, undermines intangible cultural heritage tied to specific communities and places.
- **Changes to Built Heritage** - Urban expansion can alter the historical landscape of heritage sites and introduce modern infrastructures that may not be compatible with the historical context.
- **Climatically incompatible constructions** - Cities across climatic regions are beginning to look alike, resulting in a loss of climate-responsive and site-specific spatial identity.

How can the architectural heritage help in creating climatically resilient cities?

- In the face of adverse environmental conditions, cities across the world are recognising the value of heritage in a refreshingly new context.
- **Climate resilient buildings** - Medieval structures often reveal significant cultural and climatic features that hold lessons for responding to inclement weather patterns, whether urban heat or incessant monsoons.
- **Climatic features** - Most often, heritage buildings are uniform, hermetically-sealed and air-conditioned constructions, which rarely respond to climate.
- **Natural ventilation** - Vernacular architecture, with its shade and natural ventilation elements, creates a cooler micro-climate.
- **Thermal Comfort** - For instance, the shaded thinnai — a semi-open transitional space — subdues the harsh effect of the sun.
- In the past, it facilitated a communication between the street and home, embodying a spirit of hospitality for visitors and travellers.
- These elements manifested the idea of close-knit urban communities and festivals.
- **Water Management Systems** - Historic buildings often incorporate water management systems like rainwater harvesting and greywater reuse, which can be adapted to modern contexts.
- For example, Gujarat’s ‘Bhuj Historic Water Systems.
- **Flood Resilience** - Traditional building practices in flood-prone areas, such as elevated foundations and flood-resistant materials, can be adapted to modern construction.

- **Climate risk mitigation** - The revival of heritage precincts in Rajasthan's towns has demonstrated resilience, addressing natural disasters, heatwaves, and other risks with minimal investment.

Government Initiatives on Heritage Structure Rejuvenation
• **HRIDAY (Heritage City Development and Augmentation Yojana)** - This scheme aims to preserve and revitalize heritage cities by focusing on physical, institutional, economic, and social infrastructure. • **Adopt a Heritage** - This initiative encourages individuals and organizations to take ownership of heritage sites by providing amenities and making them more visitor-friendly. • **PRASAD (Pilgrimage Rejuvenation and Spiritual Augmentation Drive)** - This scheme focuses on developing and improving pilgrimage sites across the country, enhancing the spiritual experience of pilgrims and boosting tourism.

What lies ahead?

- The 2030 Agenda by the United Nations recognises the role of heritage in sustainable development and its universal value.
- A reimagination of heritage cities by planning authorities, in collaboration with civic society, could rejuvenate these derelict neighbourhoods.
- The two aspects of 'celebrating urban life' and 'climate-friendly design' are intrinsically linked.
- Transcending conventional notions of heritage, the Kochi-Muziris Biennale is an incredible example of how a medieval heritage town was transformed into a lively cultural art biennale with the support of the Kerala government.
- Metropolitan Development Authorities could evolve more appropriate heritage guidelines and regulations to revive heritage buildings for contemporary youth needs.
- Homestays in heritage homes can provide housing to visiting scholars and artists.
- Adaptive reuse of heritage buildings for new functions such as the Blue city of Jodhpur is an intuitive response to preserving heritage homes while meeting contemporaneous needs.
- The 2030 Agenda by the United Nations recognises the role of heritage in sustainable development and its universal value.
- A holistic programme of revival of heritage precincts provide a potential to rejuvenate urban life, while addressing urban heat and monsoons.
- Beyond cultural renewal, the appropriate revival of heritage—whether in Tamil Nadu, Madhya Pradesh, or Rajasthan—has shown how towns across India demonstrate pragmatic resilience.
- They address natural disasters, heatwaves, and other risks through cohesive adaptation to the local climate.
- Heritage-based solutions can integrate green spaces into urban landscapes to mitigate heat islands, improve air quality, and provide recreational areas.

Reference

The Hindu | Heritage as climate strategy



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