

Today's Prelims Topics

10 Years of PM Mudra Yojna

Context

In April 2025, PM Mudra Yojan will complete 10 years of its launch. In 10 years 52 crore loans worth ₹32.61 lakh crore were sanctioned.

About PM Mudra Yojna (PMMY)

- Launched in 2015, for providing loans up to Rs. 10 lakh to the **non-corporate, non-farm small/micro-enterprises**.
- Funding Provision:**
 - MUDRA stands for **Micro Units Development & Refinance Agency Ltd.**, is a financial institution set up by the Government.
 - These loans are given by Commercial Banks, RRBs, Small Finance Banks, MFIs and NBFCs.
 - MUDRA does not lend directly to micro-entrepreneurs/individuals.
 - Three products are created under MUDRA, as per the stage of growth and funding needs of the beneficiary micro unit.
 - Shishu:** up to ₹ 50,000.
 - Kishore:** ₹ 50,000 - ₹ 5 lakh.
 - Tarun:** ₹ 5 lakh - ₹ 10 lakh.
 - Tarun Plus:** ₹10 lakh - ₹20 lakh (It would be available to entrepreneurs who have availed and successfully repaid previous loans under the Tarun category).
- The guarantee coverage loans for amounts up to ₹20 lakh will be provided under the **Credit Guarantee Fund for Micro Units (CGFMU)**.
 - CGFMU is a government-backed initiative aimed at providing credit guarantee coverage to loans extended to micro-enterprises and small businesses.
 - Established in 2015, this fund is managed by the **National Credit Guarantee Trustee Company Ltd. (NCGTC)**.
- Loans under the MUDRA scheme are collateral-free loans.**



UPSC PYQ

Q. Pradhan Mantri MUDRA Yojana is aimed at? (2016)

- bringing the small entrepreneurs into formal financial system
- providing loans to poor farmers for cultivating particular crops
- providing pensions to old and destitute persons
- funding the voluntary organisations involved in the promotion of skill development and employment generation

Ans: A

Source:

- [PIB - PM Mudra](#)

Great Indian Bustard

Context

Recently, four GIB chicks were hatched in a single week at the Sudasari Centre in Rajasthan, marking a key milestone in the species' recovery.

About Great Indian Bustard (GIB)

- It is **endemic** to the Indian subcontinent.
- **Habitat:** open grasslands, arid plains and scrub forests.
- **Range:** Its population is confined mostly to **Rajasthan and Gujarat**. Small population found in Maharashtra, Karnataka and Andhra Pradesh.
- **Features:**
 - Males have a distinctive black crown, a long neck, and a buff-coloured body with white underparts.
 - Females are generally smaller and lack the prominent black crown.
 - One of the heaviest flying birds, weighing between 10 to 15 kg.
 - It is primarily omnivorous.
- **Conservation Status**
 - **IUCN status:** Critically Endangered
 - **Wildlife Protection Act, 1972:** Schedule I
 - **CITES:** Appendix 1
 - Covered under species recovery program.
 - Only less than **150 GIBs** are left in the wild and almost exclusively restricted to India.
- **Threats:**
 - Power lines (disturbs visibility)
 - Habitat destruction and fragmentation & Overgrazing.
- **Steps taken to conserve GIB:**
 - **Species Recovery Programme:** It is kept in the species recovery programme under the Integrated Development of Wildlife Habitats of the Ministry of Environment, Forests and Climate Change (MoEFCC).
 - **Firefly Bird Diverters:** Firefly bird diverters are flaps installed on power lines. They work as reflectors for bird species like the GIB. Birds can spot them from a distance of about 50 metres and change their path of flight to avoid collision with power lines
 - **Artificial Hatching:** Collecting eggs from the wild and artificially hatching them.



UPSC PYQ

Q. With reference to India's Desert National Park, which of the following statements are correct?
(2020)

1. It is spread over two districts.
2. There is no human habitation inside the Park.
3. It is one of the natural habitats of the Great Indian Bustard.

Select the correct answer using the code given below:

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

Answer: C

Source:

- [Hindustan Times - GIB](#)



150th Summit of International Parliamentary Union

Context

Lok Sabha Speaker Om Birla is leading the Indian Parliamentary Delegation (IPD) for the 150th Inter-Parliamentary Union (IPU) Summit which will be held in Tashkent (Uzbekistan).

About IPU

- It is an international organization of national parliaments that promotes parliamentary dialogue, diplomacy and cooperation among nations.
- **Founded:** In 1889 (Paris), it was the world's first permanent forum for political multilateral negotiations.
- **The IPU's work includes:**
 - Promoting peace, democracy, and sustainable development
 - Establishing cooperation between parliamentarians on issues of common concern
 - Facilitating parliamentary diplomacy
- **Membership:** It has 180 members and 15 associate members.
- **Main political body:** IPU's main political body is the Assembly, which is held twice a year. At the Assembly, MPs from around the world can:
 - Exchange good practice
 - Adopt parliamentary resolutions on global issues.

Source:

- [News on Air - IPU](#)



Inter-Parliamentary Union
For democracy. For everyone.



Wombats

Context

A recent incident involving the filming of a baby wombat (joey) being taken from its mother has raised global awareness about wildlife mistreatment and the importance of responsibly interacting with wild animals.

About Wombats

- It is a short, chunky animal from Australia that lives underground in long, cool tunnels (Burrows).
- **There are three species of wombats:** Common wombat, Southern hairy-nosed wombat, **Northern hairy-nosed wombat – Critically endangered.**
- It is **nocturnal** - Active mainly at **night**.
- **Diet:** Herbivore - mainly eat grass.
- It has **super strong claws** for digging (not hunting).
- Wombats are the only known animal to produce **cube-shaped feces**. It is due to the shape and elasticity of their **intestinal muscles**.
- Wombats are **Marsupials** (Marsupials are animals that carry and nurse their young in a pouch).
- **Other Marsupials:** Kangaroo, Koala, Bandicoot, Wallaby, Tasmanian devil etc.
 - All Marsupials **do not have pouches**.



UPSC PYQ

Q. Consider the following statements: (2023)

- **Statement-1:** Marsupials are not naturally found in India.
- **Statement-II:** Marsupials can thrive only in montane grasslands with no predators.

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

- (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I.
- (b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-1.
- (c) Statement-I is correct but Statement-II is incorrect.
- (d) Statement-I is incorrect but Statement-II is correct

Answer: C

Source:

- [Times of India- Wombats](#)

News in Shorts

Topological Materials

- Topological materials are **special materials** that act **like an insulator inside** but **like a metal on the outside**. i.e.
 - **Inside:** Electricity **can't flow** (just like plastic or rubber).
 - **On the surface or edges:** Electricity **can flow easily** (like in a metal wire).
- This unusual behavior is due to their "**topological**" **properties**—which means their electrical behavior is protected by the material's **geometric and quantum properties**, not just by its chemical composition.
- These materials have **surface states** that are protected by **topological invariants**—meaning they are stable even if the material is slightly changed or has some impurities.
- **Applications:** Used in **quantum computing** to build **more stable and error-resistant quantum bits (qubits)**.
 - Recently Microsoft has used topological materials in its quantum chip - **Majorana 1**.

Source:

- [The Hindu - Topological Materials](#)

Indonesia plans world's largest deforestation for farming

- Indonesia is planning to clear forests **the size of Belgium** to grow:
 - **Sugarcane** (for **bioethanol**)
 - **Rice and other food crops**
- The project is part of a **government-backed "food and energy estate" program**.
 - Food Estates are Large-scale plantations to boost **food security**.
- It is considered the **largest current planned deforestation operation in the world**.
- It will also lead to **widespread displacement of Indigenous Tribes**.
- **Rich Biodiversity of Indonesia:**
 - Indonesia has the **third-largest rainforest in the world**.
 - **Endangered species** like orangutans, elephants, Papuan turtles and giant forest flowers.
 - **Total rainforest loss since 1950:** ➤ **74 million hectares** (285,715 sq miles) — *twice the size of Germany*.

Source:

- [Indian Express - Massive Deforestation](#)

International Standards of Accounting and Reporting

- India has been **elected uncontested** to the United Nations Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR).
- **Tenure: 2025–2027**

About ISAR

- ISAR is a UN body that promotes **global accounting and reporting standards**.
- It was created by **ECOSOC in 1983 and coordinated by UNCTAD**.
- It holds its annual sessions in Geneva to address emerging issues in enterprise accounting and reporting.
- **Objectives of ISAR:**
 - Corporate financial reporting.
 - Accounting standards.

- Environmental, social and governance (ESG) disclosures.

Source:

- [Times of India - ISAR](#)

Trends in Maternal Mortality 2000–2023 Report

- Recently a group of various UN bodies released a report related to maternal mortality trends between 2000 to 2023.

Key findings of the Report

- **40% global decline** in maternal deaths between 2000 and 2023.
- In 2023, **2,60,000 maternal deaths** occurred globally.
 - This equals **1 maternal death every 2 minutes**.
- Nigeria topped the list with **75,000 maternal deaths** (28.7% of global total).

India's Status

- In 2023, India reported **19,000 maternal deaths** (52 per day).
- **India accounted for 7.2%** of global maternal deaths.
- MMR in India reduced from **362 in 2000 to 80 in 2023**.
 - **Decline of 78%** over the period.
- **Maternal Mortality Ratio (MMR)** = No. of maternal deaths per 1 lakh live births.

Source:

- [The Print - Mortality report](#)

Palna Scheme

- It was introduced by reorganizing the **National Creche Scheme**. It was implemented under the '**Samarthya**' sub-scheme of Mission Shakti.
 - Mission Shakti is aimed at strengthening interventions for women safety, security and empowerment.
- It was launched to support working mothers by providing quality childcare services.
- It is a **centrally sponsored scheme**.
- **Target:** To establish **17,000** creches nationwide by **2025-26**.
 - **A creche** is a daycare center providing a safe and nurturing environment for children while parents work, focusing on health, nutrition, safety and age-appropriate education.
- **Nodal Ministry:** Ministry of Women & Child Development.

Key Features:

- Provides daycare for children aged **6 months to 6 years**.
- **Offers integrated services:** sleeping facilities, early stimulation, preschool education, supplementary nutrition, health check-ups and immunization.
- **The scheme has two components:** Anganwadi-cum-Creches and Standalone Creches.

Source:

- [PIB - Palna Scheme](#)

Editorial Summary

Shaping a future-ready workforce

Context

The World Economic Forum's Future of Jobs Report 2025 and QS's World Future Skills Index contain critical insights into the state of India's workforce and its preparedness for the future.

Key Insights of the Report on India's Workforce Preparedness

- **Major Disruptions Expected:** Global labour markets will be shaped by **technology, climate action, economic shifts, and geopolitical changes.**
 - **170 million new jobs** could be created, but **92 million roles may become obsolete** by 2030.
- **Upskilling is Critical:**
 - **59% of workers will need retraining**, especially in:
 - Analytical thinking
 - Resilience
 - Technological literacy
 - High-growth roles include **AI engineers** and **Big Data specialists**.
- **India's Strengths:**
 - Ranked **2nd globally** in **AI and green skill preparedness**.
 - Scored **99.1** in 'Future of Work' (ability to identify and recruit future-focused skills).
- **Gaps Identified:** Weak performance in '**Skills Fit**' (score of 59.1): Mismatch between available workforce skills and job market demands.
 - Poor **Academic Readiness** (ranked 26th globally).
 - Alarmingly low score (**15.6/100**) in **future-oriented innovation and sustainability**.
 - Insufficient **investment in R&D** hinders India's edge in green technologies and innovation.

Opportunities for India

- **Curriculum Reform:** Shift focus to **creativity, problem-solving, entrepreneurship, and adaptability.**
 - Use **interdisciplinary and experiential learning** models (e.g., design thinking, hackathons).
- **Green and Sustainable Education:** Introduce a **green curriculum** and create **centres for sustainability research.**
 - Promote **student-led environmental projects** at the community level.
- **Strengthening Academia-Industry Linkages:**
 - Co-create curriculum with industry.
 - Enable **internships, skill centres, and mentoring** programmes.
 - Align graduates with **market-ready competencies**.
- **Faculty and Infrastructure Upgrades:** Invest in **faculty development**, international exchange, and teaching innovation.
 - Build **digital infrastructure**, especially in **rural and semi-urban India**, to reduce the digital divide.
- **Government's Role:** Increase **investment in skill development, R&D, and innovation.**
 - Create an **enabling policy ecosystem** for a dynamic and future-ready higher education system.

Source: [The Hindu: Shaping a future-ready workforce](#)

A Case for Fair Seat Allocation

Context

The ongoing debate around the **readjustment of Lok Sabha seats** following the new Census is being widely **misrepresented as delimitation** in public discourse.

What is Delimitation?

Delimitation refers to the **act of fixing or refixing the boundaries of constituencies** for electoral purposes. It is conducted by the **Delimitation Commission**, but only **after a Census is undertaken**. It helps ensure fair representation by adjusting constituencies in line with population changes.

What is the Process of Readjustment of Lok Sabha Seats?

- As per **Article 82 of the Constitution**, the **Lok Sabha seats are to be readjusted** based on the population figures of each Census.
- However, the **number of Lok Sabha seats has been frozen since the 1971 Census** (population: 54.79 crore), and will remain so till **2026**, as per a constitutional amendment.
- As of 2025, the population has risen to an estimated **141 crore**, highlighting a need for seat readjustment to reflect demographic realities.

North-South Population Contrast

- **Northern States** like **Uttar Pradesh and Bihar** saw **abnormally high population growth** due to ineffective family planning:
 - **Uttar Pradesh**: 8.38 crore (1971) → 24.1 crore (2025)
 - **Bihar**: 4.21 crore (1971) → 13.1 crore (2025)
- **Southern States** like **Kerala and Tamil Nadu** successfully implemented population control, showing **lower growth**:
 - **Kerala**: 2.14 crore (1971) → 3.6 crore (2025) → only **68% increase**

Issues Highlighted by Southern States

- Southern leaders fear **losing political representation** if seat readjustment is done **purely on population basis**.
- A strict population-based formula would **reward States with high population growth** (due to policy failure), giving them disproportionate power.
- For example:
 - Uttar Pradesh could jump from **80 to 240 seats**
 - Kerala would rise modestly from **20 to 36**, despite successful governance.

Ideal Solution Suggested

- Use **Kerala's 68% population growth as a benchmark** for all States.
- Increase **Lok Sabha seats by 68% uniformly** across all States to maintain balance and fairness.
 - **Uttar Pradesh**: 80 → **134 seats**
 - **Kerala**: 20 → **34 seats**
 - **Tamil Nadu**: 39 → **66 seats**
- This approach raises the **total Lok Sabha strength to 912**, maintaining **federal equity** and **not penalizing States with successful population control**.
- Though it deviates from **Article 81(2)(a)** (equal population-to-seat ratio), the principle of **equity and federal fairness** takes precedence.

Source: [The Hindu: A Case For Fair Seat Allocation](#)

Reservation in Private Universities

Context

The concept of implementing reservation in private universities and colleges is long overdue.

Why Reservation in Private Higher Educational Institutions (PHEIs) Is Needed?

- **To Address Deepening Educational Inequality:** Higher education has become a tool for “*effectively maintained inequality*”, where upper-caste and upper-class groups preserve their dominance even as access expands.
- **Privatization Has Created an Exclusive Space:** The elite are migrating to private institutions that offer better infrastructure and faculty, while public institutions are left overcrowded and underfunded.
- **Existing Inequality in Access:** Marginalized groups (SCs, STs, OBCs, Muslims) are **grossly underrepresented** in private universities:
 - SCs: **6.8%** (vs ~17% population)
 - STs: **3.6%** (vs ~9%)
 - OBCs: **24.9%** (vs ~45-50%)
 - Muslims: **3.8%** (vs ~15%)
 - In contrast, upper-caste Hindus (~20% population) form over 60% of private university students.
- **Public Institutions Are Overburdened and Undervalued:** Public HEIs, which follow reservation norms, are overcrowded, underfunded, and understaffed.
- They are increasingly perceived as sites for “**time pass**”, lacking quality and job prospects.
- **Reservation Works Where Implemented:** In public universities (where reservation is mandatory), representation is significantly higher:
 - SCs: 14.6%
 - STs: 6%
 - OBCs: 31.2%
 - This shows **quota-based affirmative action is effective.**
- **Legal Backing Already Exists:** The **93rd Constitutional Amendment (Article 15(5))** and subsequent **Supreme Court verdicts (2011, 2014)** have cleared the way for reservation in *unaided private institutions*, making implementation legally permissible.

Note:

PHEIs include:

- State private universities
- Private deemed universities
- Aided and unaided private colleges

Legal Framework Supporting Reservation in PHEIs

- **93rd Constitutional Amendment (2005):**
 - Added **Article 15(5)**.
 - Allows the state to make **special provisions for SCs, STs, OBCs in private educational institutions (except minority institutions)**.
- **Central Educational Institutions (Reservation in Admission) Act, 2006:** Provided for OBC reservation but limited to **central educational institutions**.
- **Supreme Court Judgments:**
 - **Ashok Kumar Thakur vs Union of India (2008):** Upheld OBC reservation in state-run/state-aided institutions.

- **IMA vs Union of India (2011):** Two-judge bench upheld reservation in **unaided private institutions**.
- **Pramati Educational and Cultural Trust vs Union of India (2014):** Five-judge bench reaffirmed the above.

What Must Be Done?

- **Strengthen Public Higher Education Institutions (HEIs):** Increase funding to public colleges and universities.
 - Fill regular faculty vacancies.
 - Ensure professional autonomy and updated curricula.
 - Improve infrastructure and governance.
- **Implement Reservation in Private HEIs:** Enforce national reservation policy (for SCs, STs, and OBCs) in private institutions, both aided and unaided.
 - Ensure compliance through regulatory mandates and legislative action.
- **Mandate Freeships and Scholarships:** Private HEIs should be required to offer a certain proportion of freeships and scholarships to students from marginalized communities.
 - This would make quality education more accessible and inclusive.
- **Utilize Legal Backing:** Leverage the 93rd Constitutional Amendment (Article 15(5)) which allows for reservation in private educational institutions (excluding minority institutions).
 - Refer to Supreme Court judgments (2011, 2014) that have upheld the legality of such reservations.
- **Political Will and Action:** Bring the issue to the center of political discourse.
 - Mobilize public opinion and build consensus among political parties.
 - Push for policy implementation through party manifestos, parliamentary debates, and public statements.
- **Address Inequality in Access:** Bridge the growing divide between elite private institutions and overcrowded, underfunded public institutions.
 - Ensure historically marginalized communities can access quality education and employment opportunities.

Conclusion

Given legal sanction, long-standing political support, and the increasing dominance of private HEIs, **reservation in private universities and colleges was long overdue** to ensure **real, effective social justice** in education.

Source: [Indian Express: An Incomplete Social Justice](#)

Detailed Coverage

Kancha Gachibowli Forest (KGF)

Context

For weeks, the 400-acre Kancha Gachibowli Forest near the University of Hyderabad (UoH) has been at the center of a fight over Hyderabad's urban development.

More in News

- According to students and university community Kancha Gachibowli is part of the university's original campus land, granted in 1974.
- The **government denies this claim**.
- Recently Telangana govt. has decided to auction the land and clear the forest area.

Significance of Kancha Gachibowli Forest (KGF)

- **Hyderabad's "Green Lung":** KGF is often called the city's "green lung" due to its role in improving air quality and regulating local temperatures.
- **Biodiversity Hotspot Within An Urban Setting:** It is home to over 734 species of flowering plants, 10 species of mammals, 15 species of reptiles, and 220 species of birds.
 - **27 bird species** protected under **Schedule I of the Wildlife Protection Act, 1972**.
 - **32 species** flagged as **high conservation priorities** in the 2023 *State of India's Birds* report.

Some key species found in Kancha Gachibowli

- **Tree Trunk Spider (Murrucia hyderabadensis):** an **endemic species** found nowhere else in the world.
- **Indian Roller:** the bright blue state bird of Telangana.
- **Oriental Skylark:** known for its melodious song.
- **Monitor Lizards:** crucial for pest control in the food web.
- **Bronze-Backed Tree Snake:** a non-venomous snake native to this region.
- **Flame of the Forest (Butea monosperma):** a vibrant native tree species.

- **Hydrological Significance:** Located at the **highest point in the Manjira basin**, the forest helps:
 - Prevent urban flooding
 - Recharge freshwater lakes (e.g., Peacock Lake and Buffalo Lake)
- **Climate Regulation:** The forest acts as a natural climate regulator, mitigating urban heat and contributing to air quality.

Impact of deforestation of Kancha Gachibowli Forest (KGF)

- **Loss of Biodiversity:** Deforestation of KGF threatens the inhabited species by destroying their natural habitat.
- **Climate Disruption in Neighbouring Areas:** Destruction of the forest could **raise local temperatures by 1–4°C** in areas like Tellapur, Nallagandla, and Gachibowli, **worsening urban heat island effects**.

The **urban heat island (UHI)** effect is when cities experience significantly **higher temperatures than surrounding rural areas** due to factors like reduced vegetation, dense infrastructure, and human activities

- **Violation of Public Trust Doctrine:** Environmentalists contend that the auctioning of KGF violates the public trust doctrine, which mandates the government to protect and maintain natural resources for public use.
- **Human-Wildlife Conflict:** Destroying this forest will increase human-wildlife conflict, as displaced animals will seek food and shelter in urban areas.
- **Increased Pollution:** Removing this green cover diminishes the city's capacity to filter air, leading to higher concentrations of airborne pollutants.
- **Violation of Environmental Laws:** Activists argue that clearing forest land containing protected species without conducting an Environmental Impact Assessment (EIA) or obtaining Environmental Clearance violates environmental and wildlife protection laws.

Key Movements Against Deforestation

- In 1730, **Amrita Devi** from **Khejarli village, Rajasthan**, courageously opposed the **Maharaja of Jodhpur's** orders to cut down trees.
 - As she and **363 members of her Bishnoi tribe** hugged the trees in protest, they were brutally executed.
 - This sacrifice led the Maharaja to impose a ban on tree-cutting in the region.
- **Silent Valley Movement (1973-1985):** Protest against a hydroelectric project in Kerala to protect biodiversity.
- **Chipko Movement (1973):** A grassroots movement in Uttarakhand against deforestation.
- **Bhopal Gas Tragedy (1984):** A major industrial disaster that intensified discussions on environmental regulations.
- **Buxwaha Forest Diamond Mine Protest (2021):** Over 200,000 trees were expected to be cut in the Buxwaha forest for the diamond project.
 - This led to widespread protests, legal challenges, and social media campaigns aiming to halt the project and protect the Buxwaha forest.
- **Nandgaon Solar Plant Opposition (2025):** In Nandgaon, Maharashtra, local farmers protested against Tata Power's proposed 100-megawatt solar development.
 - The farmers, who had cultivated the land for generations, viewed the project as a corporate land grab, leading to legal disputes and halting the project's progress.

What are Arguments in Favor of KGF's Destruction?

- **Infrastructure Expansion:** Proponents argue that developing the 400-acre land will facilitate the growth of IT infrastructure, improve connectivity, and create sustainable urban spaces, aligning with the government's priorities for Hyderabad's development.
- **Revenue Generation:** The Telangana Industrial Infrastructure Corporation (TGIIC) anticipates that auctioning the land could generate significant revenue, estimated at ₹28,000 crores, contributing to the state's economic growth.
 - Moreover, this will attract potential investments of Rs 50,000 crore, and generate as many as 5 lakh jobs.
- **Preservation of Key Features:** TGIIC has stated that notable natural features, such as the **Mushroom Rock formation**, will be preserved as green spaces within the development layout, suggesting **an effort to balance development with environmental considerations**.

How Development in Urban Centres Impacts the Environment

- **Deforestation and Habitat Loss:** Expansion of **cities, industries, and agriculture** leads to large-scale **deforestation**.
 - Mature trees provide critical ecosystem services (carbon sequestration, habitat for birds and small mammals, microclimate regulation) that cannot be easily replaced.
 - **Example: Aarey Forest (Mumbai) clearance for Metro project** led to protests.
- **Air and Water Pollution:** Industrialization and urbanization increase **air pollution (CO₂, PM2.5, NOx emissions)**.
 - Water bodies get contaminated due to **untreated sewage and industrial effluents**.
 - **Example: Ganga and Yamuna rivers face severe pollution despite cleaning efforts.**
- **Climate Change and Global Warming:** **Fossil fuel consumption** in industries, transport, and power plants raises **greenhouse gas emissions**.
 - Leads to **rising temperatures, erratic rainfall, and extreme weather events**.
 - **Example: Heatwaves in India (2023) linked to climate change due to urban expansion.**
- **Soil Degradation and Desertification:** **Overuse of chemical fertilizers, mining, and deforestation** deplete soil fertility.
 - **Urban expansion and infrastructure projects** reduce arable land.
 - **Example: Thar Desert is expanding due to overgrazing and deforestation in Rajasthan.**
- **Water Scarcity and Groundwater Depletion:** **Excessive water extraction** for irrigation, industries, and urban areas lowers groundwater levels.
 - Dams and river diversions disrupt **natural water flow and aquatic ecosystems**.
 - **Example: Bangalore and Chennai face water crises due to over-extraction of groundwater.**
- **Loss of Indigenous Livelihoods:** Infrastructure projects like **dams, highways, and mining** displace **tribal and rural communities**.
 - Traditional occupations like **farming and fishing** are impacted.
 - **Example: Hasdeo Aranya (Chhattisgarh) coal mining project threatens tribal land and forests.**
- **Replacement Challenges:** The practice of “planting 10 times more trees” as a mitigation is misleading since replanted trees often cannot match the ecological value of mature trees.
 - There is a lack of scientific rigor in counting and ensuring the quality of replacement tree cover.
- **Loss of Wetlands:** India has already lost **one-third of its wetlands** in the past **four decades**, largely due to urbanisation and pollution, according to **Wetlands International South Asia (WISA)**.
- **Loopholes in Governance:** Laws like **Environment Protection Act (1986), Forest Conservation Act (1980), and EIA (Environmental Impact Assessment)** exist.
 - However, **dilution of environmental regulations** to favor industries often leads to conflicts.

What Lies Ahead for Kancha Gachibowli Forest

- **Supreme Court's Crucial Verdict (April 16):** The interim stay by the Supreme Court is a temporary win for environmentalists. The upcoming hearing will determine whether the forest receives long-term legal protection and whether an **independent ecological assessment** will be made mandatory before further development.

- **Strengthening of Grassroots Movements:** The movement led by students, ecologists, and citizens is gaining momentum. Symbolic actions—like tying sacred threads on trees and planting saplings—are not just protests but declarations of ecological commitment. This kind of civic engagement could **influence policy** and inspire future environmental activism.
- **Ripple Effects Across Cities:** Inspired by Kancha Gachibowli, similar eco-resistance is emerging in **Warangal, Visakhapatnam, and Delhi**, indicating a broader **urban ecological awakening** across India.
- **Push for Ecological Urban Planning:** The case has spotlighted the need for **scientific environmental impact assessments** before approving urban projects. It could serve as a test case for embedding **ecological sensitivity into India's urban planning** framework.
- **A New Narrative for Indian Cities:** The resistance is not just about halting bulldozers—it's about **redefining progress**. The vision ahead is one where cities are designed for **coexistence between nature and people**, rooted in sustainability, care, and community.

Source: [The Hindu: Will withdraw police from university, not Kancha Gachibowli, says Telangana govt.](#)

