

# NEWS TODAY

## 'Two Hundred and Fifty-Thousand Democracies: A Review of Village Government in India' Working Paper

Policy Research Working Paper released by the World Bank Group analyzed the **role of 73<sup>rd</sup> Constitutional Amendment in shaping India's democratic trajectory.**

- **Constitution (Seventy-third Amendment) Act, 1992** enshrined certain basic and essential features of Panchayati Raj Institutions (PRIs) in the Constitution to impart **certainty, continuity, and strength to them.**

### Key Findings of the Paper

- **Lack of Funds:** PRIs rely almost entirely on grants made by state and national authorities.
- **Lack of Functionaries:** Scarcity of Panchayat Secretaries. e.g., on average, **0.67 Panchayat Secretaries per Gram Panchayat**, with the number falling to 0.33 in states like Uttar Pradesh.
- **Recentralisation Process:** Autonomy of local governments are being eroded due to MIS-based beneficiary selection, digital tracking of beneficiaries, etc.
- **Effects of reservation:** Reservation for women and castes changed profile of households that produce candidates.

### Key Recommendations

- **Build local tax capacity:** Build better property records, give Panchayats more freedom to levy taxes, etc.
- **Strengthen Gram Sabhas:** Increase their frequency and expand their powers to encompass critical areas such as village planning and the selection of beneficiaries for public programs.
- **SHG-Panchayat linkages:** Creating more convergence and coordination between the two would also improve the functioning of Panchayats and balance their decisions more towards the needs of women.

### About 73rd Constitutional Amendment

- It added **Part IX** to the Constitution covering provisions from **Article 243 to 243-O.**

### Salient Features

- **Gram Sabha:** Permanent unit consisting of all the persons registered in the electoral rolls relating to a village.
- **3-tiers of PRIs:** At the village level, intermediate level, and district level.
  - ⊖ However, the **states with population below 20 Lakh** may not have the intermediate level.
- **Reservation:** Provision of reservation of seats for SCs and STs at every level of Panchayat in proportion to their population.
  - ⊖ It also provides for **1/3<sup>rd</sup> reservation of seats for women.**

## "Raising Ambition, Accelerating Action: Towards Enhanced NDCs for Forests" report

Report published by **UN Environment Programme (UNEP)** reveals **major gaps in forest protection, management, and restoration** in current **Nationally Determined Contributions (NDCs).**

- NDCs embody **efforts by each country to reduce national emissions** and adapt to impacts of climate change. They are **updated every five years**, starting from 2020.

### Key Findings

- An average of **5.6 billion tonnes of CO2 equivalent** was emitted from tropical deforestation **per year** between 2019 and 2023 for top 20 countries.
- **Only 8 countries include explicit quantified targets to reduce deforestation** and all fall short of global ambition to halt deforestation by 2030.
- **Only 38% of Parties to UNFCCC** include measures to reduce conversion of forests and other ecosystems.

### Drivers of Deforestation

- **Agriculture:** It is a major cause of deforestation. e.g., Deforestation rates in Indonesia are linked to fluctuations in market prices of oil palm.
- **Land-use policies:** Lack of effective and enforced land-use policies. e.g., High deforestation rates in Brazilian Amazon attributed to reduction in environmental policies.

### Key Recommendations

- **NDC targets should be designed with inclusivity**, considering diverse needs and perspectives of Indigenous Peoples and local communities.
- **Emphasize on retaining primary forests** rather than replacing them with planted forests.
- **Strengthening, enhancing & aligning forest-based measures** mentioned in NDCs and clearly defined national policies.

### International Agreements to prevent deforestation

- **REDD+ mechanism:** Efforts to **reduce emissions from deforestation and forest degradation (REDD+)** adopted at UNFCCC COP13.
- **New York Declaration on Forests:** Aimed to halve deforestation by 2020.
- **Glasgow Leaders' Declaration on Forests and Land Use:** To halt and reverse forest loss and land degradation by 2030.
- **Bonn Challenge:** Global goal to bring 150 million hectares of deforested and degraded land into restoration by 2020, and 350 million hectares by 2030.

## Study on Urbanization and regional climate change-linked warming of Indian cities

The study based on data from 141 prominent Indian cities showcases that cities are vulnerable to the **compounding effects of both climate change and urbanization**.

### Key Findings:

- **Urbanization** alone has led to an **overall 60% enhancement in warming** in Indian cities, with eastern Tier-II cities leading the way.
  - ⊕ **Urban Heat Island (UHI) effect:** The **altered thermodynamic, aerodynamic properties** of the cities tend to trap more heat, making cities warmer than their rural and suburban counterparts.
- Cities are experiencing **enhanced warming** – almost double—relative to the entire Indian domain.
- While **urbanization** and associated energy demands **contribute to emissions** and climate change, cities are on frontlines of climate change impacts due to dense population and infrastructure.

### Urbanisation driving warming in Indian Cities

- **Reduction in vegetation** and green spaces.
- **Concrete and asphalt store heat during day** and release it during night, preventing evaporative cooling that typically occurs in natural landscapes.
- **Increased human activities, vehicular emissions, and industrial output** contribute to **higher levels of greenhouse gases**, further amplifying the heat.

### Way Forward:

- **Pace and course of urbanisation must be carefully planned** using strong scientific information.
- **Comprehensive city-level climate-action plans are needed** for sustainable urban development.
- Strategic implementation of **policies targeting climate resilience**.

### Steps taken by India:

- **National Mission on Sustainable Habitat (NMSH) 2021-2030:** Promote low-carbon urban growth and build resilience of cities.
- **'Ease of Living Index' (launched in 2018)** to improve urban systems to enhance the livability of cities.
- **Climate Smart Cities Assessment Framework (CSCAF) 2.0:** will facilitate cities to adopt, implement and disseminate best practices.

## United Nations proclaimed 2025 as the International Year of Quantum Science and Technology

Year 2025 was chosen as it **recognizes 100 years** since the initial **development of quantum mechanics**.

- **Quantum Science and Technology** refers to the **study and application of the principles of quantum mechanics**, which governs the behaviour of matter and energy at the **atomic and subatomic scales**.

### Foundational concepts of quantum mechanics

- **Wave-particle duality:** Extremely small objects have characteristics of both particles (tiny pieces of matter) and waves (disturbance or variation that transfers energy).
- **Quantum superposition:** In quantum mechanics, a particle or system can exist in a superposition of multiple states simultaneously, until it is measured.
- **Entanglement:** Two particles are linked up in a certain way, affects one another and remain linked irrespective of the distance.
- **Uncertainty Principle:** We cannot know both the position and speed of a particle, such as photon or electron, with perfect accuracy at the same time.

### Applications

- **Industry and infrastructure:** Drives technological innovation and secures financial infrastructures through quantum communication.
- **Health & well-being:** Quantum photonics is advancing medical imaging and diagnosis and Quantum chemistry is supporting development of new vaccines and drugs.
- **Climate action:** More energy-efficient and affordable solar cells, low-emission LED light sources and improving accuracy of long-term climate models.

### India's Initiatives in the field of Quantum Technology

- **National Quantum Mission (2023):** Aims to seed, nurture, and scale up scientific and industrial R&D and create a vibrant & innovative ecosystem in Quantum Technology.
- **Quantum Enabled Science & Technology (QuEST):** A research program to build quantum capabilities.
- **Quantum Computing Applications Lab (QCAL):** To accelerate quantum computing-led research and development and enable new scientific discoveries.

## Centre releases Rs 1.39 trillion instalment of tax devolution to states

This cumulative amount comprises the **regular monthly devolution** along with an **additional instalment** to accelerate development and capital spending in states.

- Interim Budget 2024-25 has a provision of **Rs. 12,19,783 crore** towards **devolution of taxes** to States.

### Devolution of Taxes to States

- **Article 270** of the Constitution provides for **distribution of net tax proceeds collected by the Union government** (corporation tax, personal income tax, central GST, etc.) between Union and states.
  - ⊕ This devolution is based on the **recommendation of the Finance Commission (FC) constituted every five years as per Article 280**.
  - ⊕ This divisible pool does **not include cess and surcharge** levied by the Centre.

### Basis of Devolution

- **Vertical Devolution: Share of states** from divisible pool which presently **stands at 41%** based on the recommendations of the 15<sup>th</sup> FC.
- **Horizontal Devolution:** It refers to distribution **among the states** from the share allocated to states based on various criteria.
  - ⊕ As per 15<sup>th</sup> FC, the assigned criteria with their weights are: **Income Distance (45%), Area (15%), Population, 2011 (15%), Demographic performance (12.5), Forest and Ecology (10%), and Tax and fiscal efforts (2.5%)**.

### Grants to States

- **Post Devolution Revenue Deficit Grant:** It is provided under Article 275 of the Constitution as per FC recommendations.
- **Sector-Specific Grants:** 15<sup>th</sup> FC has recommended such grant to states for 8 sectors including health, education, agricultural reforms etc.
- **State-Specific Grants:** 15<sup>th</sup> FC recommended these in areas of social needs, administrative governance and infrastructure, water and sanitation, preservation of culture and historical monuments, high-cost physical infrastructure and tourism.

## Karnataka government's temporary ban on a film triggers Freedom of Artistic Expression debate

Karnataka government issued a temporary ban of 2 weeks on release of a Hindi film to **prevent any potential religious discord and preserve communal harmony in the state**.

- **Freedom of artistic expression** is the principle that an artist should be unrestrained by law or convention in the making of his or her art.

### Freedom of Artistic Expression in India

- **Supreme Court in Rangarajan v. P. Jagjivan Ram Case (1989)** held that **movies enjoy the rights guaranteed under Article 19(1)(a)** [Right to Freedom of Speech and Expression].
- Provisions for freedom of opinion and expression are also enshrined under the **Universal Declaration of Human Rights (UDHR)** as well as **International Covenant on Civil and Political Rights (ICCPR)**, to which India is signatory.

**Why do films stand on a slightly different plane from other forms of expression?** (SC observations in Rangarajan v. P. Jagjivan Ram Case)

- The combination of act and speech, sight and sound in semi darkness of the theatre with elimination of all distracting ideas will have a **strong impact on the minds of the viewers and can affect emotions**.
- Therefore, it **cannot be equated with other modes of communication and censorship by prior constraint** is, therefore, **not only desirable but also necessary**.

## Also in News



### Snow Leopard (*Panthera Uncia*)

Research has found that **Snow leopards also eat plants** despite being carnivorous.

#### About Snow Leopards

- **Habitat:** Inhabits **mountains of Central and South Asia** with **12 snow leopard range countries** including India.
  - ⊕ Currently, there are around **718 snow leopards in India**.
  - ⊕ Their distribution coincides closely with distribution of their **principal prey, ibex and blue sheep (bharal)**.
- Snow leopard is the **state animal of Himachal Pradesh and Ladakh**.
- **Characteristics:** Have short forelimbs and long hind limbs for traversing in rugged mountainous environments.
- Conservation Status:
  - ⊕ **IUCN:** Vulnerable
  - ⊕ **CITES:** Appendix I
  - ⊕ **Wildlife (Protection) Act, 1972:** Schedule I



### Notified Disasters

Heatwave events have reopened discussions on **inclusion of heatwave as notified disasters** under the Disaster Management (DM) Act, 2005.

#### About Notified Disasters

- **DM Act 2005** provides for allocation and utilization of resources from the National Disaster Response Fund (NDRF) and State Disaster Response Fund (SDRF).
  - ⊕ Money in these funds can be **utilized only for response and management of notified disasters**.
- **Presently, there are 12 Notified Disasters** including Cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloud burst, pest attack, frost & cold wave.
  - ⊕ In 2020, government **treated Covid-19 as notified disaster** as a special one-time dispensation.



### Quality Council of India (QCI)

Quality Council of India (QCI) celebrates **World Accreditation Day**, a global initiative to **promote the value of accreditation** (formal recognition of meeting established quality standards).

#### About QCI

- QCI is a **non-profit organization** registered under the **Societies Registration Act XXI of 1860**.
- It was established as a **National body for Accreditation** in 1996.
- QCI was set up through a **Public-Private Partnership (PPP) model** as an independent autonomous organization.
- The **Department of Industrial Policy and Promotion** designated as the nodal point for all matters connected with quality and QCI.



### JIMEX

**Bilateral Japan – India Maritime Exercise (JIMEX) 2024** commenced at Yokosuka in Japan.

- This is the **eighth edition**, since its inception in 2012.



### Multi-Drug Resistant Pathogens

Researchers from IIT Madras and NASA are **studying multi-drug resistant (MDR) pathogens**, particularly **Enterobacter bugandensis**, on the International Space Station (ISS).

- It is a prevalent **nosocomial (hospital acquired infection) pathogen** found on surface within ISS.
- Enterobacter species are on the **WHO priority list for developing new antimicrobials**.

#### Multi-Drug Resistant (MDR) Pathogens

- Pathogens (bacteria, virus, fungi, parasites, etc. that causes disease) that **have become resistant to antimicrobial drugs** like antibiotics, antifungal etc.
- They **occur either naturally** through genetic changes or may get accelerated due to the **misuse or overuse** of antimicrobials.

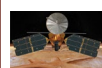


### Prevention of Arms Race in Outer Space (PAROS)

In a recent joint statement, BRICS Ministers for Foreign Affairs emphasized the need to discuss a **legal multilateral instrument on PAROS**.

#### About PAROS Treaty

- In 2008, **draft treaty** submitted to the **Conference on Disarmament** aims to **refrain State Parties** from **placing objects carrying any type of weapon into orbit**, installing weapons on celestial bodies, and threatening to use force against objects in outer space.
- It would **complement and reaffirm** the importance of the **1967 Outer Space Treaty**.



### Mars Reconnaissance Orbiter

High-Resolution Imaging Science Experiment camera onboard **NA-SA's Mars Reconnaissance Orbiter (MRO)** captured images of a mysterious pit on the side of an ancient volcano on Mars.

#### About MRO

- **Launched in 2005**, it is the **second longest-lived spacecraft to orbit Mars**.
- **Objective:** To gain better knowledge of distribution and history of water on Mars.
- Its **telecommunications systems provide a crucial service for Martian spacecraft**, serving as the first link in a communications bridge back to Earth.



### Viduyut Rakshak

Indian Army launched **Viduyut Rakshak Monitoring System** as part of its modernisation drive.

#### About Viduyut Rakshak

- Viduyut Rakshak is an **Internet of Things (IoT)-enabled integrated generator monitoring, protection and control system**.
  - ⊕ IoT is a network of interrelated devices that connect and exchange data with other IoT devices and the cloud.
- Indigenously developed by the **Army Design Bureau (ADB)**.
- It **integrates and automates operation of multiple generators** from a single system remotely.

## Places in News



### Malawi (Capital: Lilongwe)

Malawi Vice President was killed in a plane crash in the Chikangawa mountain range.

#### Political Features

- It is a **landlocked country in southeastern Africa**.
- **Neighbouring countries:** Mozambique (East and South), Zambia (West), and Tanzania (North).

#### Geographical Features

- **Relief:** 4 basic regions - Great African Rift Valley, central plateaus, the highlands, and the isolated mountains.
- **Major Lakes:** Lake Malawi and Lake Chilwa.
- **Major Rivers:** Rukuru, Dwangwa, Lilongwe, Bua, etc.
- **Major Ranges:** Mt. Mulanje, Mt. Nakodzwe, Mt. Dzole, Mt. Namasile, etc.
- **Highest Peak:** Sapitwa peak (in Mt. Mulanje)

