Today's Prelims Topics

Only Parliament can constitutionally remove HC judge

Context

Rajya Sabha Chairman has asserted that only Parliament has the jurisdiction to constitutionally remove a High Court judge.

About Process of Removal - By the Parliament

- A judge can be removed from office through a motion passed by Parliament on the grounds of **"proved misbehaviour or incapacity."**
- Although the Constitution does not mention the term **"impeachment,"** it is commonly used to describe the removal process under **Article 124** (for Supreme Court judges) and **Article 218** (for High Court judges).

Procedure for Removal of Judges (as per the Judges Inquiry Act, 1968):

- **Initiation of Impeachment Motion: (Under Section-3 of the Act)**
    - The impeachment motion can originate in either House of Parliament:
        - **Lok Sabha:** Requires a signed notice by at least **100 members**.
        - **Rajya Sabha:** Requires a signed notice by at least **50 members**.
    - The **Speaker** (for Lok Sabha) or **Chairman** (for Rajya Sabha) may consult individuals and examine relevant materials before deciding whether to admit or reject the motion.
- **Investigation Committee Formation:**
    - If the motion is admitted, the Speaker or Chairman will form a **three-member committee** to investigate the charges. The committee consists of:
        - **Chief Justice of India** or a **Supreme Court judge (Head of Committee)**
        - The **Chief Justice of a High Court**
        - A **distinguished jurist (In opinion of Speaker/Chairman)**
- **Framing of Charges:** The committee frames charges and provides a copy to the judge, who can submit a **written defence**.
- **Committee Report Submission:** After completing the investigation, the committee submits its report to the Speaker or Chairman.
    - The report is then presented before the concerned House of Parliament.
- **Consideration of Motion:** If the report finds evidence of **misbehaviour or incapacity**, the motion for removal is considered and debated in the House.
- **Adoption of Motion:** The motion must be passed in each House by:
    - A **majority of the total membership** of that House.
    - A **two-thirds majority** of the members present and voting.
    - If the motion passes in one House, it is sent to the other House for approval.
- **Presidential Order:** Once both Houses adopt the motion, it is sent to the **President**, who issues an order for the judge's removal.

- Except for a **removal motion**, the legislature cannot discuss a judge's misconduct.

Source:

- **The Hindu - Removal of HC Judge**

President Rule in Manipur

Context

President Rule is imposed in Manipur for the 11th time. President Droupadi Murmu issued a proclamation under Article 356 of the Constitution after receiving a report from Governor Ajay Kumar Bhalla.

About President Rule

Constitutional provisions regarding President Rule

- **Article 355:** Duty of the Centre to ensure that the government of every state is carried on in accordance with the **'provisions of the Constitution'.**
- **Article 356:** President can issue a proclamation that the government of state cannot be carried in accordance with the 'provisions of the constitution'. **(can act with or without a Governor's report).**
- **Article 365:** Failure of state government to comply with the directions of the Centre → President can hold that State government cannot be carried in accordance with the 'provisions of the constitution' → President's Rule

- **Approval:** Must be approved by both houses of Parliament **within two months** with a simple **majority**.
- **Duration:** After approval by both houses' emergency continues for **six months.**
    - It can be extended for a maximum period of **three years (Parliament approval every 6 months).**
- **Revocation:** President proclamation (No Parliamentary approval is needed).

Effects of President Rule

- The President is empowered to administer the state under the President's rule as it dismisses the State Council of ministers headed by the Chief Minister.
- The President can transfer State Legislature's powers to **Parliament.**
- It **does not impact** the functioning of the High Court.
- The President **can only dissolve a state legislative assembly after Parliament's approval of the proclamation**, and until then, the assembly remains suspended. **(SC in SR Bommai Case)**

Facts

- Article 356 was used for the first time while imposing the President's rule in **Punjab in 1951.**
- Laws made by Parliament, President or any other specified authority **continue to be operative** even after the end of the President's Rule. **i.e.**, Laws are not **coterminous** with the duration of President's Rule
    - However such laws can be **altered or repealed** by the state legislature.
- Manipur has undergone the **maximum number of President rule - 11** (Including latest).

Source:

- **The Hindu - President Rule**

Iran vows to rebuild nuclear sites if attacked

Context

Iranian President Masoud Pezeshkian has vowed to rebuild nuclear facilities if attacked, responding to U.S. reports of a possible Israeli strike on key Iranian sites.

Major Nuclear Facilities of Iran

- **Natanz Nuclear Facility: Uranium enrichment**
  - **Location:** Isfahan Province
  - **Significance:** One of Iran's most important nuclear sites. Houses thousands of centrifuges for uranium enrichment.
- **Fordow Fuel Enrichment Plant (FFEP): Uranium enrichment**
  - **Location:** Near Qom, buried deep inside a mountain.
  - **Significance:** Highly fortified against airstrikes. Originally secret, but revealed by Western intelligence in 2009.

Source: New Scientist/ Global Security

- **Arak Heavy Water Reactor (IR-40): Plutonium production**
  - **Location:** Markazi Province
  - **Significance:** Can produce plutonium, which can be used in nuclear weapons.
- **Bushehr Nuclear Power Plant: Civilian nuclear energy production**
  - **Location:** Southern Iran, near the Persian Gulf
  - **Significance:** Iran's only operational nuclear power plant. Built with Russian assistance.

Source:

- [The Hindu - Iran Nuclear Sites]

Arab League

Context

Recently the Arab League has rejected U.S. President Donald Trump's Gaza relocation plan, terming it unacceptable.

About Arab League

- **Arab League (League of Arab States**) is a regional organization of **22 Arab countries** in the Middle East and North Africa (MENA).
- It aims to promote political, economic, cultural and security cooperation.
- **Formation: March 22, 1945** (by six founding members: Egypt, Iraq, Jordan, Lebanon, Saudi Arabia, and Syria). **Headquarters: Cairo, Egypt**
- **Member States: 22**
    - **North Africa:** Algeria, Egypt, Libya, Mauritania, Morocco, Sudan, Tunisia
    - **Middle East:** Bahrain, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria (suspended in 2011), United Arab Emirates (UAE), Yemen
    - **Horn of Africa:** Somalia, Djibouti, Comoros
    - **Observer States:** India, Brazil, Venezuela, Eritrea.

Key Institutions & Agreements

- **Arab League Council:** Main decision-making body.
- **Economic & Social Council:** Handles trade and economic integration.
- **Arab Parliament:** Established in **2001** for legislative cooperation.
- **Arab Peace Initiative (2002):** Proposal for a two-state solution to the Palestine-Israel conflict.

Source:

- The Hindu - Arab League

Detection of High-Energy Cosmic Neutrinos

Context

Scientists detected a high-energy cosmic neutrino deep beneath the Mediterranean Sea near **Sicily** using an advanced observatory under construction.

About Neutrino's

- Neutrinos are a type of subatomic particle.
- They don't have an electric charge. They have a small mass and are left-handed
    - **Left-Handed:** A physics term meaning the direction of its spin is opposite to the direction of its motion
- They are the second-most abundant particles after photons (particles of light) and the most abundant among particles that make up matter.
- They are produced in high-energy processes such as within stars and in supernovae.
- On earth, they are produced by particle accelerators and nuclear power plants
- They are very hard to detect as they hardly interact with other forms of matter due to their lack of electrical charge.

Why is this Discovery Important?

- **Unlocking Extreme Cosmic Events:** Cosmic neutrinos help scientists study distant and violent events like **black hole activity and supernovae**.
- **A New Window into the Universe:** Unlike **light**, which can be scattered or absorbed by cosmic dust and gas, neutrinos **travel undisturbed** from their sources. This provides a **direct and clear** look at extreme cosmic events.
- **Understanding the Early Universe:** Neutrinos carry valuable **information from the Big Bang**, helping scientists understand **the universe's origins**.

Neutrino observatories around world

- **IceCube:** Located at the South Pole, this is the largest neutrino telescope in operation. It's buried 2,500 metres underground and has a surface array called IceTop and an inner sub detector called DeepCore.
- **Super-Kamiokande:** Located in Kamioka, Japan, this observatory uses 50,000 tons of pure water surrounded by 11,200 light detectors.
- **Gran Sasso National Laboratories (LNGS):** Located in the Gran Sasso mountains in Italy.
- **Underground Neutrino Observatory:** Located in Mont Blanc, France / Italy.
- **Deep Underground Neutrino Experiment (DUNE):** Located in South Dakota, USA.

Source:

- **Indian Express - High Energy Neutrino**

National Broadband Mission 2.0

Context

Recently the Union Govt. has introduced **National Broadband Mission 2.0** to enhance broadband connectivity, particularly in rural and remote areas.

About National Broadband Mission (NBM) 2.0

- NBM 2.0 aims to address **broadband connectivity challenges** in **rural, remote and difficult terrain regions** through **several targeted initiatives**:
    - **Promoting Satellite Broadband:** Encourages the use of **satellite technology** to **provide high-speed internet** in remote areas where fiber networks are difficult to deploy.
    - **Utilizing Power Sector Infrastructure for Connectivity:** Coordination with the Ministry of Power to use **Optical Ground Wire (OPGW)** for broadband expansion.

Key Objectives of NBM 2.0:

- **Expansion of Broadband Access:**
    - **Village Connectivity:** Aim to connect the remaining **1.7 lakh (170,000) villages**, focusing on remote and economically underserved regions.
    - **Optical Fiber Coverage:** Expand **Optical Fiber Cable (OFC) connectivity** to **2.7 lakh (270,000) villages** by **2030**.
- **Enhancement of Internet Speed:**
    - Achieve a **minimum fixed broadband download speed of 100 Mbps** nationwide, a significant increase from the current average of 63.55 Mbps.
- **Affordability and Inclusivity:**
    - Provide **affordable broadband services** to bridge the socio-economic divide, ensuring that digital resources are accessible to all citizens.
- **Institutional Connectivity:**
    - Ensure that **90% of anchor institutions**, such as schools, primary healthcare centers, and Anganwadi centers, have broadband access by **2030**.

Source:

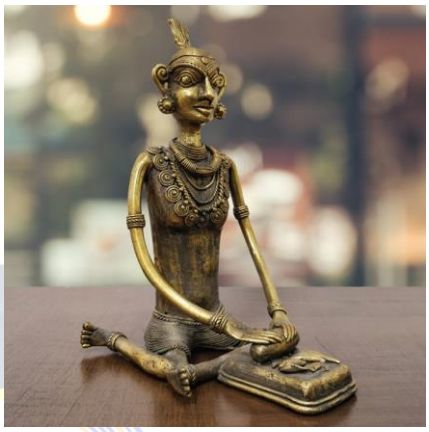
- **PIB - NBM 2.0**

News in Shorts

Dokra Artwork

- During his recent visit to France PM Narendra Modi presented the French President with a meticulously crafted Dokra artwork depicting musicians adorned with studded stonework.

About Dokra Metal Craft



- **Dokra metal craft** is an ancient form of metal casting using the **lost-wax technique (cire-perdue)**.
- It is practiced by the **Dhokra Damar tribe**, primarily in **West Bengal, Odisha, Chhattisgarh, Telangana, and Jharkhand**.
- The art form dates back **over 4,000 years** and is linked to the **Indus Valley Civilization**.
- The famous **"Dancing Girl" figurine** of Mohenjo-Daro is an example of this technique.

Key Features of Dokra Art

- **Nature-Inspired Motifs:** Animals, birds, trees, and deities.
- **Tribal and Folk Influence:** Figurines of tribal people, village life, and religious icons.
- **Unique Designs:** No two Dokra pieces are identical due to the handmade process.

Source:

- TOI - Dokra

Climate Risk Index (CRI)

- **India among the top 10 most affected nations** by extreme weather events from **1993 to 2022**.

About CRI

- It is published by **Germanwatch** (an independent development, environmental and human rights organization based in Bonn and Berlin).
- It is a backward-looking index ranking the human and economic toll of extreme weather with the most affected country ranked highest.
- **First Published: 2006**.

Climate Risk Index - 2025

- India is ranked the **6th most affected country during 1993-2022 in the CRI 2025.**

- India faced over 400 extreme weather events in three decades, causing losses of USD 180 billion and at least 80,000 fatalities.
- **Countries ahead of India:** Dominica, China, Honduras, Myanmar & Italy.

Source:

- **Hindustan Times - CRI**

Nordic-Baltic Eight (NB-8) countries

- NB-8 is a regional cooperation format consisting of five Nordic countries and three Baltic states.
- The grouping focuses on political, economic and security cooperation in Northern Europe.
- **Member Countries:**
  - **Nordic Countries:** Denmark, Finland, Iceland, Norway, Sweden.
  - **Baltic States:** Estonia, Latvia & Lithuania.
- Among NB-8 countries **Sweden** is India's largest trading partner.

Source:

- **PIB - NB-8**

Editorial Summary

Appointment of Ad hoc Judge

Context

The Supreme Court's recent decision to permit the appointment of retired judges as ad-hoc judges in High Courts to address case backlog—particularly criminal appeals—is a significant move.

Arguments in Favor

- **Immediate Relief for Case Backlog:** With over 62 lakh pending cases in High Courts, additional judicial manpower can help expedite the resolution of long-pending criminal appeals.
- **Precedent and Constitutional Backing:** Article 224A of the Constitution provides for the appointment of ad-hoc judges, and the 2021 **Lok Prahari v. Union of India** case reaffirmed its validity.
- **No Impact on Regular Appointments:** Since ad-hoc judges do not compete for promotions or permanent judicial positions, their appointment does not interfere with the elevation of sitting High Court or district court judges.
- **Minimal Political Sensitivity:** As ad-hoc judges are unlikely to handle politically sensitive cases, government approval may not face significant resistance.
- **Reduced Burden on Prisons:** Expediting criminal appeals can help reduce overcrowding in jails by ensuring faster disposal of cases involving undertrial prisoners.

Challenges and Concerns

- **Government Cooperation and Delays:** The process of appointing ad-hoc judges requires executive approval, and past delays in judicial appointments suggest this could become a bottleneck.
- **Judicial Infrastructure and Support Staff:** Courts already face resource constraints. Ensuring adequate courtrooms, stenographers, and legal researchers for ad-hoc judges is crucial for their effectiveness.
- **Attracting Qualified Retired Judges:** Many retired judges prefer arbitration or private practice due to better financial incentives. Unless attractive perks are offered, getting competent judges to return may be challenging.
- **Potential Procedural Hurdles:** The Supreme Court previously found the appointment process cumbersome. Streamlining it—without unnecessary intelligence clearances—will be key to ensuring timely implementation.
- **Judicial Independence Concerns:** While ad-hoc judges serve for a fixed term, their past associations in the legal fraternity and potential return to private practice may raise concerns over impartiality.

Conclusion

The appointment of ad-hoc judges is a practical short-term measure to address judicial backlog, especially in criminal appeals. However, its success depends on swift government action, adequate infrastructure, and ensuring that qualified judges are willing to take up the role. In the long run, structural reforms in judicial appointments, case management, and digitalization are essential to sustainably address pendency.

Source: **The HIndu: Is appointing ad-hoc judges a viable means to reduce backlog?**

The problematic globalisation of medical education

Context

- The current landscape of medical education is marked by a paradox: a significant shortage of medical doctors exists alongside governmental and professional resistance to expanding access to medical training.
- This situation has led to increased international mobility among medical students, with many seeking education abroad due to limited opportunities in their home countries.

Challenges in Medical Studies in India

- **Limited Medical Seats & High Competition:** Around **2.3 million students appear for the NEET exam annually, but only 1 in 22 secures admission.**
    - Government medical seats are limited, and private colleges charge exorbitant fees, pushing students to study abroad.
- **Quality Concerns in Foreign Medical Education:** Many Indian students study in countries like Russia, pre-war Ukraine, China, and the Philippines, where education quality varies.
    - Graduates must clear the Foreign Medical Graduate Examination (FMGE) to practise in India, but the pass rate remains low.
- **Regulatory and Infrastructure Issues:** India faces a shortage of faculty and infrastructure in medical colleges.
    - Many newly established medical colleges lack adequate hospital facilities and experienced faculty.
- **Rural-Urban Healthcare Divide:** Most medical graduates prefer urban postings due to better facilities and pay, leaving rural healthcare underdeveloped.
    - Bonded service requirements for government medical colleges often go unenforced.
- **Internship and Residency Bottlenecks:** Even after medical graduation, securing internship and postgraduate residency seats remains highly competitive.

Global Challenges

- **International Student Mobility and Quality Variations:** Over 2,00,000 students study medicine outside their home countries, often in institutions with questionable training standards.
    - European countries like Poland and Hungary attract U.S. and European students, while the Caribbean caters to U.S. aspirants.
- **Regulatory Gaps in Foreign Medical Schools:** Many international medical schools are for-profit institutions with minimal oversight.
    - Language barriers and cultural adjustments also impact students' learning experiences.
- **Licensing and Accreditation Hurdles:** Medical graduates must pass licensing exams (e.g., USMLE in the U.S., FMGE in India) to practise in their home countries.

    - Different countries have varying recognition standards, making it difficult for foreign-trained doctors to integrate into their home healthcare systems.
- **Shortage of Medical Seats in Developed Nations:** Countries like Norway, France, and Germany have limited medical seats, forcing students to study in Central and Eastern Europe.
    - The shortage of doctors leads to dependency on foreign-trained professionals, raising concerns about skill standardization.

Recent Budget Announcements on Medical Education (Union Budget 2025)

- **Increase in Medical Seats:** The government has added nearly **1.1 lakh undergraduate and postgraduate seats** in the last decade, marking a **130% increase**.
    - Plans to introduce **10,000 additional medical seats** in 2026.
- **Long-Term Expansion Plan:** The government has set a target to **add 75,000 more medical seats over five years** to meet the rising demand for doctors.

Conclusion

While the Indian government is taking steps to expand medical education, challenges such as infrastructure, quality control in foreign medical education, and licensing hurdles remain significant. The global trend of students seeking medical education abroad due to limited seats and high costs highlights the need for **better regulatory frameworks and capacity-building in domestic medical institutions**.

Source: The Hindu: The problematic globalisation of medical education

Detailed Coverage

Climate Change

Context

January 2025 was officially the hottest January ever recorded globally, according to new data released this week by the National Oceanic and Atmospheric Administration (NOAA).

What is Meant by Climate Change?

- It refers to long-term shifts in global or regional climate patterns, primarily caused by natural processes and human activities.
- It is characterized by rising global temperatures, changing weather patterns, and increased frequency of extreme weather events.

Causes of Climate Change

Natural Causes

- **Volcanic Eruptions** : Large eruptions release dust and gases like sulfur dioxide, temporarily cooling the Earth by blocking sunlight.
- **Solar Variability** : Changes in solar radiation influence the Earth's climate cycles over centuries.
- **Ocean Currents** : Phenomena like **El Niño and La Niña** affect global temperature and weather patterns.
- **Earth's Orbital Changes (Milankovitch Cycles)** : Variations in Earth's orbit and tilt impact long-term climate changes.
- **Natural Greenhouse Effect** : Water vapor and naturally occurring CO_2 help maintain Earth's temperature but can fluctuate over time.

Human-Induced Causes

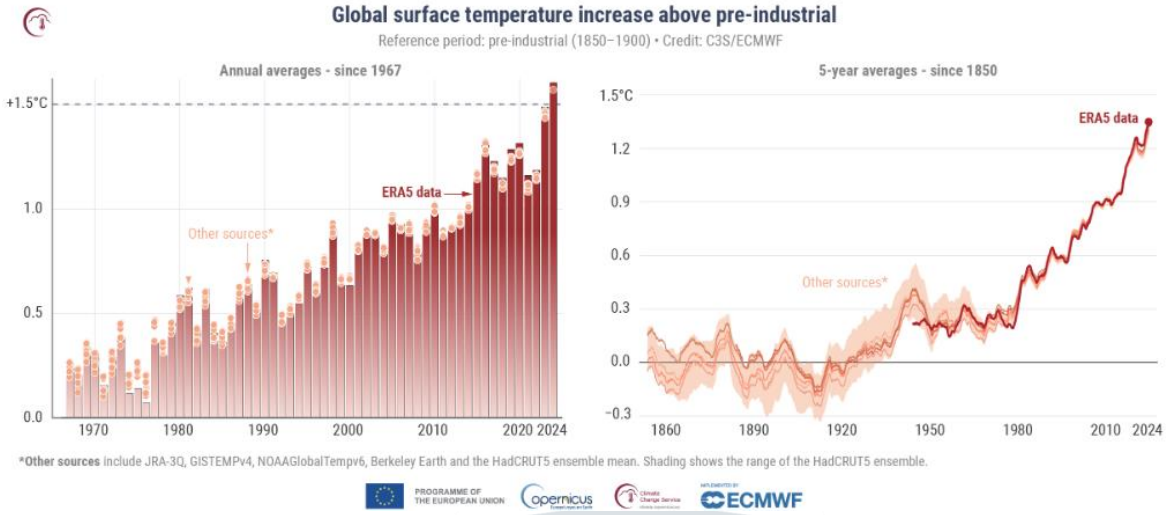
- **Burning Fossil Fuels** : Coal, oil, and gas release CO_2, intensifying the greenhouse effect.
- **Deforestation** : Cutting down forests reduces CO_2 absorption, increasing its concentration in the atmosphere.
- **Industrial and Agricultural Activities** : Factories emit carbon, while livestock farming produces methane (CH_4).
- **Urbanization and Land Use Changes** : Expanding cities reduce vegetation and contribute to heat island effects.
- **Pollution and Waste** : Landfills release methane, and plastic pollution disrupts ecosystems.

Effects of Climate Change

Global

- **Rising Global Temperatures:** The increase in greenhouse gas concentrations has led to a significant rise in global surface temperatures.

- **E.g.,** 2024 is confirmed by the Copernicus Climate Change Service (C3S) to be the warmest year on record globally, and the first calendar year that the average global temperature exceeded 1.5°C above its pre-industrial level.



- **Agriculture**: Climate change affects water availability for irrigation and increases pest attacks, impacting crop growth and productivity.
    - **E.g.,** A 2°C rise in global mean temperatures by 2100 could significantly disrupt current farming systems.
- **Extreme Weather Events**: There's an increased frequency of extreme weather events, such as droughts and floods, due to changing rainfall patterns.
- **Livestock Production**: Climate change leads to productivity losses in livestock due to temperature increases and alters the availability, quality, and prices of inputs like fodder, disease management, and water.
- **Water Resources**: Rising water temperatures intensify pollution and negatively affect aquatic habitats. Increased evapotranspiration leads to the shrinking of some water bodies.
- **Sea-Level Rise**: Climate change is raising sea levels, threatening vital infrastructure, salinating freshwater resources, and damaging agriculture due to increased soil salinity.
    - **E.g.,** Global average sea levels have risen approximately 8:9 inches (21–24 centimeters) since 1880, with the rate of increase accelerating in recent decades.
- **Ecosystems and Biodiversity**: Changes in climate can lead to the extinction of some species and increased acidification of water resources.
- **Human Health**: Climate change threatens human health by increasing incidences of heatstrokes and vector-borne diseases.
    - **E.g.,** The World Health Organization estimates that between 2030 and 2050, climate change may cause approximately 250,000 additional deaths per year from malnutrition, malaria, diarrhea, and heat stress.

Effects on India

- **Extreme Weather Events:** Increased frequency of **heatwaves, floods, droughts, and cyclones**.

    - **E.g.,** The **2023 monsoon floods** in Himachal Pradesh caused significant casualties and infrastructural damage.
- **Rising Temperatures and Heatwaves:** More frequent, prolonged, and severe heatwaves.
    - **E.g.**, **Delhi recorded 52.9°C** in 2024, its highest-ever temperature.
- **Agricultural Disruptions:** Unpredictable monsoons, desertification, and soil erosion impact crop yields.
    - **E.g., Punjab's wheat yields declined** due to heat stress in 2023.
- **Water Scarcity:** 54% of India faces **high-to-extreme water stress** (World Resources Institute).
    - E.g.,: **Shrinking Himalayan glaciers** threaten river water supply.
- **Sea-Level Rise & Coastal Erosion:** Threat to coastal cities like **Mumbai, Chennai, and Kolkata**.
    - **E.g., Sundarbans losing landmass**, impacting local communities.
- **Health Hazards:** Increased cases of **vector-borne diseases (malaria, dengue)**.

International Efforts to Combat Climate Change

Key International Organisations

- **UN Framework Convention on Climate Change (UNFCCC)**: Serves as a platform for global negotiations on climate action.
- **Intergovernmental Panel on Climate Change (IPCC)**: Provides scientific insights and assessments to guide climate policies.

Major International Agreements

- **Paris Agreement (2015)**: Aims to restrict global temperature rise to well below 2°C above pre-industrial levels.
- **Kyoto Protocol (1997)**: Established legally binding emission reduction commitments for developed nations.

Global Climate Programs

- **REDD & REDD+** : Market-based mechanisms designed to curb greenhouse gas emissions from deforestation and forest degradation.
- **Clean Development Mechanism (CDM)**: Enables developed nations to invest in emission reduction projects within developing countries under the Kyoto Protocol.
- **Sustainable Development Goals (SDGs)**: Particularly **SDG-13**, which focuses on climate action and resilience.

Other International Initiatives

- **Technological Innovations**: Advancements in **renewable energy, Carbon Capture and Storage (CCS), and green infrastructure** are being prioritized.
- **Public Awareness Campaigns**: Global initiatives like **Earth Hour** promote climate consciousness and encourage community participation.

Indian Government Initiatives to Tackle Climate Change

- **Policy and Action Plans**
    - **National Action Plan on Climate Change (NAPCC):** Eight missions, including **National Solar Mission, National Water Mission, and Green India Mission**.

    - **State Action Plans on Climate Change (SAPCCs):** Tailored climate adaptation and mitigation strategies at the state level.
- **Heatwave Management & Disaster Preparedness**
    - **Heat Action Plans (HAPs):** Over **250+ HAPs** developed for urban and rural areas.
        - Focus on **early warning systems, modified working hours, and cooling shelters**.
    - **National Framework for Heatwave Mitigation and Management (2024):** A long-term strategy for preparedness and mitigation.
    - **Common Alerting Protocol (CAP):** Improved heatwave alerts and early warnings.
- **Water Management Initiatives**
    - **Jal Jeevan Mission**: Ensures piped drinking water for all rural households.
    - **Atal Mission for Rejuvenation and Urban Transformation (AMRUT)**: Focuses on urban water conservation.
    - **Catch the Rain Campaign**: Encourages rooftop rainwater harvesting.
- **Renewable Energy & Emission Reduction**
    - **National Solar Mission**: Targets **500 GW non-fossil fuel capacity by 2030**.
    - **Faster Adoption & Manufacturing of Electric Vehicles (FAME)**: Promotes **EVs** for reducing carbon emissions.
    - **Perform, Achieve, and Trade (PAT) Scheme**: Encourages industries to reduce energy consumption.
- **Ecosystem & Biodiversity Conservation:**
    - **National Adaptation Fund for Climate Change (NAFCC)**: Supports projects in **agriculture, forestry, and water resources**.
    - **Afforestation Projects (Green India Mission, CAMPA)**: Focus on increasing forest cover and carbon sequestration.

Source: **Indian Express: The Heat of the Moment**