## Current Affairs 18th March 2025 by Saurabh Pandey Sir



○ Yaoshang is celebrated annually during the full moon of the Lamta month in the Manipuri lunar calendar.

The festival typically occurs in March.

**\*** It marks the beginning of spring.

Closely associated with the Hindu festival of Holi. 
Features unique regional customs and traditions.

Reflects the cultural heritage of the Manipuri people.

 $\Re$  Includes various local festivities and activities

Wheat Production AND Heat Key Wheat-Producing States Wheat is primarily grown in the northwestern parts of India, particularly in states like Uttar Pradesh, Punjab, Haryana, and Madhya Pradesh. These regions are crucial for the country's wheat supply. Sowing and Harvesting Seasons Wheat is typically sown between October and December and harvested from February to April during the rabi crop season. However, with rising temperatures, the timing of these activities could be thrown off balance

The Relationship Between Heat and Wheat Understanding Heat Stress Climate variability isn't new, but it becomes alarming when it overlaps with the crop growth season.

Heat stress can significantly impact wheat production, leading to reduced yields and lower quality.

### Effects on Growth and Development

A study published in the International Journal of Molecular Sciences highlights that heat stress alters essential processes like photosynthesis and respiration, ultimately affecting grain production and quality

Stages of Wheat Growth Germination to Emergence Wheat growth can be divided into stages, starting from germination to emergence, where the seedling breaks through the soil. Growth Stages and Heat Sensitivity As the plant progresses through its growth stages, it becomes increasingly susceptible to heat stress, particularly during the reproductive phase

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# The Bigger Picture: Climate Change and Agriculture Warming Oceans and Monsoon Patterns

The Indian Ocean is warming at an alarming rate, which could lead to a "near-permanent heat wave state" by the end of the century. This warming will likely disrupt monsoon affecting agricultural cycles. patterns. Mitigation Adaptation and Strategies Importance of Food Security Food security is paramount, especially for farmers who rely on wheat for both consumption and income. Addressing heat stress is crucial for maintaining this security

Policy Recommendations for Farmers Experts suggest immediate policy support for farmers, including compensation for heat stress effects and long-term strategies like promoting heat-resistant wheat varieties and adjusting sowing dates.

Conclusion In conclusion, the recordbreaking temperatures in February and the forecast for March pose significant challenges for wheat production in India. As the country navigates these climate-related issues, it's essential to prioritize food security implement effective adaptation and strategies. The future of wheat in India depends on our ability to respond to these challenges head-on

The Hindu

### Pi Day

Pi Day Celebration: Pi Day is celebrated on March 14 each year, reflecting the first three digits of pi (3.14).

Definition of Pi: Pi is a mathematical constant representing the ratio of a circle's circumference to its diameter, with applications in various fields. In Historical Significance: The concept of pi has been utilized for thousands of years, with origins traced back to ancient civilizations like Egypt, Babylon, and China.

<sup>∞</sup> Origin of Pi Day: The celebration of Pi Day began in 1988 by physicist Larry Shaw at a San Francisco science museum.

□ National Recognition: In 2009, the US Congress officially recognized March 14 as Pi Day to promote interest in math and science.

 $\doteq$  Einstein's Birthday: March 14 is also notable as the birthday of Albert Einstein, adding to the day's significance.

□ Irrational Nature of Pi: Pi is an irrational number, and early calculations were performed by mathematicians like Isaac Newton, with significant advancements made by Srinivasa Ramanujan in 1914

The Hindu

# The Role of the Election Commission & ELECTION REFORM

The Election Commission of India is entrusted with the monumental task of overseeing the electoral process. Its primary responsibilities include: Preparing electoral rolls and ensuring that all eligible citizens are registered to vote. Conducting elections: Organizing free and fair elections at all levels of government. Monitoring political parties: Ensuring compliance with electoral laws and regulations. The authority of the EC is enshrined in Article 324 of the Constitution, which grants it the power to supervise, direct, and control the entire election process. This provision ensures that the EC has the final say in how elections are conducted, safeguarding against malpractices.

Legal Provisions Governing Elections Representation of the People Act, 1950 The Representation of the People Act, 1950 forms the cornerstone of electoral laws in India: Eligibility of voters: Outlines who can vote, ensuring inclusivity in the electoral process. Electoral rolls: Details the procedures for the preparation and maintenance of electoral rolls. Registration of Electors Rules, 1960 This framework complements the Act by providing specific guidelines for registering voters, essentially reinforcing the integrity of the electoral rolls.

Evolution of the Voting Process Historical Changes in Voting Methods Since the first general elections in 1952, the voting process in India has transformed dramatically: 1952: Voters used blank ballot papers dropped into multiple boxes—an archaic method that seems almost surreal today! Modern Era: The introduction of Electronic Voting Machines (EVMs) has revolutionized the voting experience. From Ballot Boxes to EVMs The shift to EVMs, backed by Voter Verifiable Paper Audit Trail (VVPAT) slips since 2019, enhances security and transparency in the voting process.

Recent Issues in the Election Process Allegations of Electoral Roll Manipulation Recently, significant controversies have arisen: Manipulation claims: Allegations during the Maharashtra and Delhi Assembly elections suggest that bogus voters may have been added to electoral rolls to favor the ruling party. Duplicate EPIC Numbers Concerns over identical EPIC numbers for voters across different states have raised questions about the authenticity of the electoral list, pointing to a need for a more centralized database

Campaign Process Concerns The integrity of campaign practices is also in the spotlight: Inappropriate conduct: Many 'Star Campaigners' have been accused of using derogatory language and making unfounded allegations. Expenditure violations: With estimates of election expenditures soaring to ₹1,00,000 crores, the potential for corruption looms large. Under Paragraph 16A of the Symbols order, the EC has the power to suspend or withdraw the recognition of a recognized political party for its failure to observe MCC or follow lawful directions of the Commission. Criminalization of Politics Worryingly, nearly 46% of elected MPs in 2024 faced criminal charges, necessitating urgent reforms.

Proposed Reforms for a Stronger Election Process Enhancing EVM and VVPAT Reliability To restore confidence in the electoral process: Scientific sample sizes: Establishing a scientifically determined sample size for matching EVM counts with VVPAT slips. Full recount protocols: Initiate a complete recount if discrepancies are found. thereby ensuring accuracy. Addressing Duplicate Voter IDs Consider linking citizens' Aadhaar numbers with EPIC cards to tackle the issue of duplicate voter IDs while being mindful of privacy concerns.

Reforming Campaign Practices The EC should be empowered to revoke the status of 'Star Campaigners' who breach the Model Code of Conduct, ensuring adherence to electoral regulations. Conclusion The integrity of our electoral process is paramount for a flourishing democracy. A robust dialogue between the Election Commission and political parties is essential

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for addressing persistent issues and implementing necessary reforms. A strengthened electoral process not only instills confidence in voters but also fortifies the very foundations of our democracy



### Humber River

The Humber is a large tidal estuary located on the east coast of Northern England.

It is formed at Trent Falls, Faxfleet, by the confluence of the tidal rivers Ouse and Trent.

 $\stackrel{\scriptstyle{\scriptstyle{\leftarrow}}}{=}$  The estuary extends from its formation point to the North Sea.

**W** It serves as a boundary between the East Riding of Yorkshire (north bank) and North Lincolnshire (south bank).

The Humber is also referred to as the River Humber.

**.** It is tidal along its entire length.

▶ The estuary plays a significant geographical role in the region



The United Nations Relief and Works Agency for Palestine Refugees (UNRWA)

• The United Nations Relief and Works Agency for Palestine Refugees (UNRWA) is funded almost entirely by voluntary contributions from UN Member States.

• UNRWA also receives some funding from the Regular Budget of the United Nations, which is used mostly for international staffing costs.

• The Agency's services encompass education, health care, relief and social services, camp infrastructure and improvement, microfinance and emergency assistance, including in times of armed conflict

Establishment Following the 1948 War, UNRWA was established by United Nations General Assembly Resolution 302 (IV) of 8 December 1949 to carry out direct relief and works programmes for Palestine refugees. The Agency began operations on 1 May 1950. In the absence of a solution to the Palestine refugee problem, the General Assembly has repeatedly renewed UNRWA's mandate, most recently extending it until 30 June 2026

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## Greenhouse Gas Emissions and Satellite Sustainability Impact of Greenhouse Gas Emissions

Reduction in Satellite Capacity: Humaninduced greenhouse gas emissions could potentially decrease the number of satellites that can safely orbit Earth by up to 66% by the end of the century under high-emission scenarios.

Atmospheric Changes Contraction and Cooling: The increase in greenhouse gases leads to the contraction of Earth's upper atmosphere, resulting in a cooling effect. This reduces orbital density and extends the lifespan of space debris.

Future Satellite Capacity **%** Projected Decrease: By 2100, the sustainable management of satellites in low Earth orbit might

Deorbiting Rates **\$** Decrease in Deorbiting: There is a notable reduction in the rate at which satellites deorbit due to atmospheric drag, especially under moderate to high carbon dioxide emission scenarios.

Research Insights **M** Study by MIT: Research led by Dr. William Parker and colleagues at MIT underscores the significance of atmospheric modeling in predicting future satellite sustainability. Orbital Space Management

✓ Need for Careful Management: The study highlights the necessity for meticulous management of orbital space as the number of satellites increases and space debris becomes a growing concern. Importance of Mitigation ✓ Emission Reduction: Lowering greenhouse gas emissions is vital not only for climate health but also for ensuring continued access to outer space