

DAILY CURRENT AFFAIRS (DCA)

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STANDING STONES OF MUDUMAL IN TELANGANA

Context

 Recently, the Standing Stones of Mudumal, located in Telangana's Narayanpet district, have been added to the tentative list of UNESCO World Heritage Sites.

About the Mudumal Megalithic Menhirs (Standing Stones)

 These are large standing stones (aka menhirs), some reaching heights of 10 to 14 feet, that were likely erected by prehistoric communities, arranged in a pattern.



- Located near the banks of the Krishna River.
- These stones are believed to have been used for funerary rites and astronomical observations, showcasing the advanced understanding of celestial events by prehistoric communities.
- This site is a significant remnant of the megalithic tradition in South Asia, dating back approximately 3500 to 4000 years.
- Archaeologists suggest that these megaliths date back to 1000 BCE – 300 BCE, making them contemporary to the Iron Age cultures of South India.

Megalithic Culture in India

- It is associated with **Neolithic and Iron Age** societies that thrived between 1500 BCE and 500 CE, especially in the **Deccan Plateau.**
- The standing stones in Mudumal align with similar megalithic traditions found in other parts of South India, such as in Karnataka and Kerala.

Other Similar Sites in India

- Hire Benekallu in Karnataka: It is notable for its extensive collection of menhirs, dolmens, and cave paintings, earning a place on the UNESCO Tentative List in 2021.
- Vibhutihalli in Karnataka: It showcases a large rectangular field of boulders arranged in avenues, demonstrating solar alignments.

• **Nilgiri Dolmens in Tamil Nadu:** These comprise dolmens, stone circles, cists, and petroglyphs.

Other Global Sites

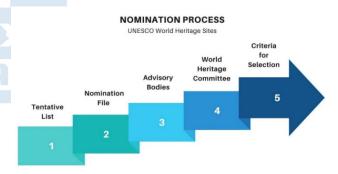
- Stonehenge in England and the Carnac stones in France (these have already been recognized by UNESCO).
- The largest known menhir is the Grand Menhir Brisé in France, once stood at 20.6 m tall.

Significance of Mudumal Menhirs

- Astronomical Importance: These menhirs are carefully positioned to align with celestial events such as solstices and equinoxes.
- Cultural and Spiritual Relevance: One particular menhir is worshipped as Goddess Yellamma, and the site is locally known as 'Niluralla Thimmappa' (Thimmappa of the Standing Stones).

Path to UNESCO Recognition

 The inclusion of Mudumal's Standing Stones in the UNESCO Tentative List is the first step toward achieving full World Heritage status. The next steps involve:



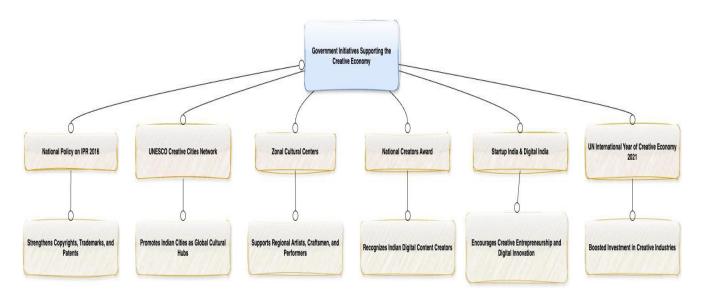
- Detailed Documentation & Research: Further archaeological and historical studies will strengthen the nomination process.
- **Government and Public Support:** The Indian government, along with heritage conservation bodies, must actively push for its recognition.
- **UNESCO Evaluation:** Experts will assess the site's cultural and historical value before making a final decision.

Source: TH

WOMEN'S POLITICAL PARTICIPATION IN INDIA

Context

 Rajeshwari Deshpande's study, 'Shaping of the Woman Constituency in Indian Elections: Evidence from the NES Data' analyses political participation of women in India.



Major Highlights of the Study

- Voting Behavior & Agency: Women's voting patterns and choices are often overlooked, with political parties treating them as a homogeneous group and not considering factors like caste, class, and religion.
- Welfare Programs: Political parties often frame women as passive beneficiaries of welfare programs like Ujjwala and Pradhan Mantri Awas Yojana, reinforcing a dependent image.
- Voting vs Political Power: Despite increased turnout, women's political participation remains limited beyond voting.
 - Women lag behind men in other forms of political participation like rallies, campaigns, and policy advocacy, facing social and structural barriers.
- Male Migration Impact: In states with largescale male migration, women's voter turnout has increased, especially in socially and economically 'backward' areas.
- State-Specific Voting Patterns: In states with strong regional parties (e.g., Tamil Nadu, Kerala), women's preferences align more with regional movements rather than national gender-based trends.

Women's Political Participation in India

- Unlike many countries where the gender gap in political participation began narrowing in the 1990s, India saw this shift only in the 2010s.
- In the 2019 general elections, female voter turnout slightly exceeded male voter turnout, with women making up 49.5% of the electorate.
- In the 2024 Lok Sabha elections, women had a slightly higher voting percentage (65.8%) compared to men (65.6%).

 Women, especially in rural areas, are becoming more politically conscious, active, and involved in village-level decision-making.

Global Goals

- Women's equal participation and leadership in politics are crucial for achieving the Sustainable Development Goals (SDGs) by 2030.
 - **SDG 5** focuses on gender equality and women's empowerment.
- Balanced political participation and powersharing between women and men in decisionmaking is a key target set in the Beijing Declaration and Platform for Action.

Factor's Influencing Women's Political Participation

- Socio-Cultural Norms: Traditional gender roles and cultural expectations often limit women's public and political involvement.
- Education and Literacy: Higher literacy rates and education levels empower women to participate more actively in politics.
- **Economic Independence:** Women's workforce participation and economic independence can boost their political agency.`
- Caste, Class, and Religion: Women's political choices are shaped by their caste, class, and religious identities, influencing their voting behavior and party affiliations.
- Political Party Strategies: The outreach and engagement of political parties with women through targeted policies or welfare schemes impact their participation.
- **Social Movements:** Women's involvement in social movements and activism can strengthen their engagement in formal politics.
- Regional and State-Specific Factors: Regional political contexts, including the strength of local

parties and issues specific to states, can shape women's political behavior.

Measures Taken

Constitutional Measures

106th Constitutional Amendment

Women's Reservation Act 2023 mandates 33% reservation for women in the Lok Sabha.





Right to Vote

Articles 325 and 326 of the Constitution (Universal Adu Franchise).

73rd and 74th Amendments







Right to Contest Elections

Articles 84 and 173 of the Constitution.

Conclusion

- The decentralization of governance which is taking place for the last two decades has increased the importance of measuring participation of women in decision making.
- Proper gender budgeting has already been worked out for inclusive growth of women.
- With more responsive data on women participation, better gender budget initiatives aim to move the country towards a gender equal society.

Source: TH

MAKING AMERICA GREAT AGAIN (MAGA) EFFECT OUTSIDE THE US

In News

 Donald Trump's aggressive trade policies, particularly the imposition of higher tariffs, have had global economic repercussions.

Key Developments Under Trump's Economic & Trade Policies

- Tariff Impositions & Trade Wars:
 - Imposed tariffs on China, the EU, Canada, and Mexico, leading to retaliatory measures.
 - Affected global supply chains, economic growth, and market stability.
 - Increased costs for U.S. consumers and businesses, contributing to inflationary pressures.
- Challenges to International Organizations:
 - Reduced U.S. contributions to the UN, and NATO.
 - Signed executives orders to withdraw from membership of the World Health Organization (WHO).

Withdrawal from Global Agreements:

- Signed executive order directing U.S. withdrawal from the Paris climate agreement
 — again.
- Exited the Trans-Pacific Partnership (TPP), affecting trade alliances in the Indo-Pacific.
- Impact on the U.S. Dollar & Inflation:
 - Higher tariffs raised domestic prices, impacting purchasing power.
 - Trade tensions led to fluctuations in global markets, affecting investor confidence.
 - Some countries explored alternative trade settlements, raising concerns about the U.S. dollar's role as the global reserve currency.

India's Response

- Since 2016, India has raised tariffs and increased protectionist measures, diverging from its earlier trend of reducing import duties.
- Despite internal pressure, India maintained higher tariffs but is now reassessing its stance in response to Trump's trade policies.
- The Union Budget has reduced customs duties on various items, signaling a shift away from protectionism, aiming for better trade relations with the U.S.
- Average customs duty has been reduced to 10.66% from 11.66%.
 - Duty cuts on items such as bourbon, high-end cars, and motorcycles are intended primarily for Washington.
- The tariff cuts aim to address concerns over India's high-tariff economy as global trade barriers rise.

China's Consumption Push

- To counter the trade war with the U.S., China has introduced a comprehensive consumption boost plan, marking the most extensive policies in over 40 years.
- The plan includes raising workers' incomes and improving domestic spending to shift from an export-driven to a consumption-driven economy.
- China aims to make people more confident in spending, with the government targeting around 5% growth.
- Analysts expect further stimulus in 2025 to mitigate the impact of U.S. tariffs.

Europe's stand

 European leaders are reacting to the U.S. threat to withdraw defense support, with Germany increasing defense spending and setting up a 500-billion-euro infrastructure fund.

- Although the short-term impact on GDP is uncertain, these measures aim to boost Europe's security and economic growth.
- Some European countries are considering closer ties with Canada, possibly with Canada joining the EU, as Trump's policies push Canada away.

Way Ahead

- Expanding FTAs: India has already signed key Free Trade Agreements (FTAs) with UAE, Australia, and ASEAN nations, and is negotiating deals with the UK, EU, and Canada.
- Boosting Domestic Manufacturing: The Production-Linked Incentive (PLI) scheme should be expanded to support key sectors like electronics, pharmaceuticals, and green energy.
- Promoting Agricultural & Service Exports: Strengthening global markets for Indian agriculture, textiles, IT, and pharmaceuticals.
- Strengthening WTO's Role: India should push for fair trade rules, particularly for developing nations in the WTO.
- Championing BRICS & G20 Economic Reforms: India, as a key BRICS and G20 member, should lead discussions on de-dollarization, alternative payment mechanisms, and sustainable finance.
- Reforming IMF & World Bank Voting Rights: Advocating for greater representation of emerging economies in financial decisionmaking.

Source :IE

NBRI DEVELOPS GM COTTON RESISTANT TO PINK BOLLWORM

Context

 Scientists at the CSIR-NBRI in Lucknow claim to have developed the world's first genetically modified (GM) cotton that is totally resistant to the Pink Bollworm (PBW).

About

- Since the implementation of GM cotton in India in 2002, varieties such as Bollgard 1 and Bollgard 2, developed jointly with Monsanto have effectively controlled certain bollworm species.
 - However, these varieties have not maintained robust defence against the PBW.
- The CSIR-National Botanical Research Institute (NBRI) is a premier research institution in India dedicated to botanical research and conservation.

Pink Bollworm (PBW)

- The pink bollworm (PBW), known among farmers as gulabi sundhi, damages the cotton crop by burrowing its larvae into the cotton bolls.
 - This results in the lint being cut and stained, making it unfit for use.
- Spread: PBW primarily spreads through the air.
 Residue of infected crops, often left by farmers on the field to be used as fuel, can also harbour PBW larvae which can then infect future crops.
- **Prevention:** To prevent future infestation, fields which saw PBW infestation should not be planted with the cotton crop, for at least one season.
 - Farmers are advised to burn residue at the earliest, and ensure there is no mixing between healthy and unhealthy seeds (or cotton).

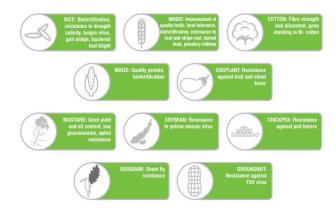
What are GM crops?

- Crops that have undergone genetic engineering processes to alter their DNA are referred to as genetically modified crops.
 - This alteration is done to introduce desirable traits such as resistance to pests or herbicides, improved nutritional content, or increased yield.
- The process of creating GM crops typically involves: identification of desired traits, isolation of genes, insertion into crop genome, and expression of the trait.
- The techniques used in GM crops are: gene guns, electroporation, microinjection, agrobacterium etc.
- The types of modification are: transgenic, cisgenic, subgenic and multiple trait integration.
- The main trait types in GM crops are herbicide tolerance (HT), insect resistance (IR), Stacked traits etc.

Indian Scenario in GM crops

- Bt Cotton: In 2002, the GEAC had allowed the commercial release of Bt cotton.
 - Bt cotton has two alien genes from the soil bacterium Bacillus thuringiensis (Bt) that allows the crop to develop a protein toxic to the common pest pink bollworm.
 - Till now, it is the only GM crop that is allowed in India.
- Many varieties of GM crops are under different stages of development, like Bt brinjal and DMH-11 mustard.

GM crops R&D in India



Regulatory framework in India

- The Genetic Engineering Appraisal Committee (GEAC): It under the Ministry of Environment, Forest and Climate Change (MoEF&CC), is responsible for the assessment of proposals related to the commercial release of GM crops.
- Acts and rules that regulate GM crops in India are:
 - Environment Protection Act, 1986 (EPA)
 - Biological Diversity Act, 2002
 - Plant Quarantine Order, 2003
 - GM policy under Foreign Trade Policy
 - Food Safety and Standards Act, 2006
 - Drugs and Cosmetics Rule (8th Amendment), 1988.

Source: TOI

NEWS IN SHORT

RANGPANCHAMI

Context

 Rangpanchami is held five days after Holi, it marks the festive conclusion of the celebrations.

About

- The name "Rang Panchami" is derived from "Rang," meaning colour, and "Panchami," referring to the fifth day.
- Its celebration is observed primarily in Maharashtra, Gujarat, Madhya Pradesh, and parts of Rajasthan.
- It marks the arrival of the **spring season** and people celebrate by throwing and applying colored powders (gulal) on each other.

Source: TOI

COMPETITION COMMISSION OF INDIA

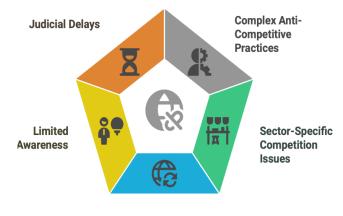
In News

The Competition Commission of India (CCI)
has conducted extensive raids on the offices of
major global advertising agencies over alleged
IPL ad rate fixing.

About Competition Commission of India (CCI)

- **Establishment:** Statutory body established in 2009 under the **Competition Act, 2002.**
- **Ministry:** It is a quasi-judicial body operating under the **Ministry of Corporate Affairs.**
- Purpose: Aims to prevent anti-competitive practices, promote and sustain market competition, protect consumer interests, and ensure the freedom of trade in India's markets.
- Members: It consists of a Chairperson and 6
 Members appointed by the Central Government.
- Powers & Functions of CCI: Investigates anticompetitive agreements, cartelization, and abuse of dominance.
 - Imposes penalties on companies violating competition laws.
 - Advises the Central and State Governments on policy matters affecting competition.
- Key Cases Handled by CCI:
 - Google Antitrust Case (2023): Fined Google 1,338 crore for anti-competitive practices in the Android ecosystem.
 - Amazon-Future Group Case: Examined Amazon's stake in Future Coupons for unfair trade practices.

Challenges Faced By CCI



Globalization

Source: BS



ONLINE ASSURANCES MONITORING **SYSTEM (OAMS)**

In Context

The Union Parliamentary Affairs Minister recently highlighted the role of the Online Assurances Monitoring System (OAMS) in managing government assurances.

About

- It is a digital platform implemented by the **Ministry** of Parliamentary Affairs (MoPA) to enhance transparency and efficiency in managing government assurances.
- Assurances are promises, undertakings, or commitments given by Ministers during answers to parliamentary questions or debates.
- Assurances should ideally be fulfilled within three months of being made.
- The Ministry of Parliamentary Affairs (MoPA) is responsible for implementing assurances under the Government of India (Allocation of Business) Rules, 1961.

Source: PIB

PRIME MINISTER'S YOUNG AUTHORS **MENTORSHIP SCHEME (YUVA) SCHEME**

In News

The Ministry of Education (MoE) and the National Book Trust (NBT) of India launched the third edition of the Prime Minister's Young Authors Mentorship Scheme.

Earlier editions

- YUVA 1.0 (launched in May 2021) marked the beginning of the initiative during the Azadi Ka Amrit Mahotsav celebrations, commemorating 75 years of India's independence.
 - Its theme was the National Movement of India, focusing on unsung heroes, little-known facts, and various aspects of the freedom struggle.
- YUVA 2.0 (launched in October 2022) built upon the foundation of YUVA 1.0 with a focus on Democracy as the core theme.
 - It aimed to develop young writers who could explore India's democratic values, traditions, and governance structures.

PM-YUVA 3.0 Launch



It aims to nurture young writers under 30 years of age, providing them with mentorship and exposure to hone their creative writing skills.

- It builds upon the success of its predecessors, YUVA 1.0 and YUVA 2.0, continuing the government's commitment to fostering literary talent and promoting reading, writing, and book culture in India.
- It focuses on three themes: the Contribution of the Indian Diaspora in Nation Building, Indian Knowledge System, and the Makers of Modern India (1950-2025).

Importance

- The scheme aims to nurture young writers who can explore various aspects of India's past, present, and future.
- It also provides aspiring youth with an opportunity to express themselves and present a comprehensive view of India's contributions across different fields, both ancient and modern.
- The scheme aligns with the vision of Ek Bharat, Shreshtha Bharat, encouraging the documentation and dissemination of India's rich cultural heritage and knowledge.

Source:PIB

INDIA TAKES 24TH SPOT IN FREE SPEECH SURVEY

In News

 A global survey by The Future of Free Speech ranked India 24th out of 33 countries on support for free speech.

About the survey

- The survey, conducted in October 2024, revealed that more countries have seen declines in free speech support since 2021, with democratic nations like the United States, Israel, and Japan experiencing the most significant drops.
- It found that abstract support for free speech is strong, but commitment to protecting controversial speech is eroding globally.

Key Findings

- Norway and Denmark ranked at the top of the Future of the Free Speech Index with scores of 87.9 and 87.0, respectively.
- Indonesia (56.8), Malaysia (55.4), and Pakistan (57.0) showed the biggest improvements but remained at the lower end of the rankings.
- Some authoritarian-leaning countries, such as Hungary (85.5) and Venezuela (81.8), scored high, suggesting a disconnect between government restrictions and public attitudes.

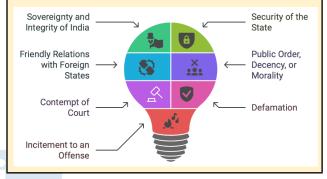
India's Specific Findings

- India scored 62.6, ranked 24th, between South Africa (66.9) and Lebanon (61.8).
- The majority of Indians consider it important to speak freely without government censorship.
- 37% of Indians supported the idea that governments should be able to prevent criticism of government policies—the highest among all surveyed countries.
 - In comparison, only 5% in the U.K. and 3% in Denmark endorsed this sentiment.
- India, along with Hungary and Venezuela, was an exception to the general trend where support for free speech aligns with actual protection.

Freedom of Speech in India

- Article 19(1)(a): Guarantees every Indian Citizen the Right to Freedom of Speech and Expression.
- As per the rulings of the Supreme Court, the 'Freedom of Speech and Expression' as contained in Article 19(1)(a) includes the following:

- Right to propagate one's own as well as others' views.
- Freedom of silence.
- Freedom of the press.
- Right against the imposition of precensorship on a newspaper.
- Freedom of commercial advertisements.
- Right against tapping of telephonic conversation.
- Restrictions Article 19(2): The 'Freedom of Speech and Expression' is subject to reasonable restrictions by the State on the following grounds:



Source: TH

SUSTAINABLE DEVELOPMENT VS. ENVIRONMENTAL PROTECTION

In Context

 The Supreme Court recently set aside the National Green Tribunal (NGT) order restraining the Auroville Foundation from proceeding with its township project in Puducherry without environmental clearance.

Key Aspects of the Judgement

- The Supreme Court recognized both the precautionary principle and the polluter pays principle as part of India's environmental law.
- However, it ruled that while the right to clean environment is a guaranteed fundamental right under Articles 14 (equality) and 21 (right to life) of the Constitution of India, the right to development through industrialisation equally claims priority under fundamental rights, particularly under Articles 14, 19 (right to engage in any profession, occupation, trade or business) and 21 of the Constitution of India.
- The Court stressed a "golden balance" between development and environmental protection.

Source: TH



NATIONAL MISSION FOR CLEAN GANGA (NMCG)

In News

 The National Mission for Clean Ganga (NMCG) is facing significant tax issues, with demands amounting to 243.74 crore from the Income Tax (I-T) department.

More About the News

 The issue arose because, despite being upgraded to an 'authority' under the Environment (Protection) Act, 1986 in 2016, NMCG's PAN remained classified as an Association of Persons (AOP), triggering scrutiny by the I-T department's software, which flagged it as a high-income entity.

The National Mission for Clean Ganga (NMCG)

- It was registered on 12th August 2011 as a society under the Societies Registration Act 1860 and initially served as the implementation arm of the National Ganga River Basin Authority (NGRBA).
- However, the NGRBA was dissolved on 7th October 2016, and the National Ganga Council was established under the Environment (Protection) Act (EPA), 1986, to oversee the rejuvenation and protection of the Ganga.

Structure

- The mission operates under a five-tier structure at the national, state, and district levels.
- This structure includes:
 - National Ganga Council under chairmanship of Hon'ble Prime Minister of India.
 - Empowered Task Force (ETF) on river Ganga under chairmanship of Hon'ble Union Minister of Jal Shakti (Department of Water Resources, River Development and Ganga Rejuvenation).
 - National Mission for Clean Ganga(NMCG).
 - State Ganga Committees and
 - District Ganga Committees in every specified district abutting river Ganga and its tributaries in the states.

Functions

- The National Mission for Clean Ganga (NMCG) is responsible for abatement of pollution in river Ganga and its tributaries
- It aims to address pollution, ensure adequate water flow, and rejuvenate the Ganga.

Source :IE

WORLD'S LARGEST WHITE HYDROGEN DEPOSIT

Context

 France has discovered a massive 46-million-ton white hydrogen reserve in the Moselle region, valued at \$92 trillion.

About

- White hydrogen, a naturally occurring gas in the Earth's crust, is a relatively new discovery in the energy sector.
- Unlike other forms gray, brown, blue, and green hydrogen — white hydrogen requires no industrial production and emits no carbon, making it an environmentally superior energy source.
- Its potential is enormous, with deposits found worldwide, including in the US, Russia, Australia, and Europe.

Extraction of Hydrogen

- Hydrogen exists in combination with other elements, so it must be extracted from naturally occurring compounds like water (H2O).
 - Green hydrogen is produced using renewable energy sources (wind, solar, hydropower) through electrolysis—splitting water into hydrogen (H2) and oxygen (O2).
 - When the electricity for electrolysis comes from renewable sources, the hydrogen produced is green.
- Grey hydrogen is produced from natural gas using steam methane reforming (SMR), releasing CO2 and contributing to greenhouse gas emissions.
- Blue hydrogen involves capturing and storing CO2 emissions from hydrogen production using natural gas.

Source: TN

VIKRAM AND KALPANA: ISRO DEVELOPS HIGH-SPEED MICROPROCESSORS

Context

 The Indian Space Research Organisation (ISRO) and the Semiconductor Laboratory (SCL) in Chandigarh have jointly developed two cutting-edge 32-bit microprocessors, Vikram 3201 and Kalpana 3201.

About

- They are optimised for efficiency and performance, specifically designed for space applications.
- Vikram 3201 is India's first fully indigenous 32-bit microprocessor qualified for use in the harsh conditions of launch vehicles and it can process 32 bits of data at a time.
 - It supports floating-point computations and offers high-level language compatibility.
- Kalpana 3201 is also a 32-bit SPARC V8 RISC microprocessor based on the IEEE 1754 Instruction Set Architecture.
 - It is designed to be compatible with opensource software toolsets and has been tested with flight software, making it versatile for various applications.

Source: ISRO

EXERCISE VARUNA 2025

Context

 The 23rd edition of the annual naval 'Exercise VARUNA' between India and France has commenced in the Arabian Sea.

About Exercise VARUNA

- It was started in 2001 to enhance interoperability and operational synergy between India & France.
- VARUNA 2025 features a series of drills and manoeuvres involving underwater, surface, and air operations.

Other Exercises

- **EXERCISE SHAKTI:** Indian and French Armies
- **EXERCISE GARUDA:** Indian Air Force (IAF) and French Air and Space Force (FASF).

Source: PIB



