



DAILY CURRENT AFFAIRS 08-01-2025

GS-1

1. Ghana

GS-2

2. Decoding national anthem controversy

GS-3

3. Human Metapneumovirus
4. AI and deepfake concerns
5. Cancel Coal Case

Ghana

Syllabus: GS-1; Geography- Mapping

Context

- John Mahama Sworn in as Ghana's President for Third Time Amid Economic Challenges.

Know More



General Information

- **Location:** West Africa
- **Capital:** Accra
- **Neighboring Countries:**
 - Côte d'Ivoire (west)
 - Burkina Faso (north)
 - Togo (east)

- Gulf of Guinea (south)
- **Official Language:** English
- **Currency:** Ghanaian Cedi (GHS)

History

- **Pre-Colonial Era:** Known for the Kingdom of Ashanti, one of the richest African empires in the 17th and 18th centuries.
- **Colonial Era:** Colonized by the British; known as the Gold Coast due to its rich gold resources.
- **Independence:** First sub-Saharan African country to gain independence on March 6, 1957, under the leadership of **Kwame Nkrumah**.
- **Post-Independence:** Struggled with military coups until transitioning to stable democracy in the 1990s.

Political System

- **Government:** Unitary presidential constitutional democracy.
- **Parliament:** Unicameral; members are elected for four-year terms.

Economy

- **Natural Resources:**
 - Gold (second-largest producer in Africa)
 - Cocoa (second-largest exporter worldwide)
 - Oil (discovered in significant quantities in 2007).
- **Agriculture:** Backbone of the economy; includes cocoa, palm oil, and yams.
- **Challenges:** Dependence on commodities, fluctuating global prices, and debt management.

Geography and Climate

- **Geographical Features:** Plains, low hills, and river basins.
- **Major Rivers:** Volta River (with the Akosombo Dam forming Lake Volta, the largest artificial lake by surface area in the world).

Culture and Society

- **Ethnic Groups:** Predominantly Akan, followed by Mole-Dagbani, Ewe, and others.
- **Religion:**
 - Christianity (majority)

- Islam
- Traditional African religions.
- **Festivals:** Homowo, Aboakyir, and Panafest celebrate Ghanaian heritage.
- **UNESCO Heritage Sites:** Cape Coast Castle and Elmina Castle, which were hubs during the transatlantic slave trade.

International Relations

- **Regional Role:** Active member of ECOWAS (Economic Community of West African States).
- **UN Peacekeeping:** Significant contributor to UN peacekeeping forces.
- **Relations with India:**
 - Ghana and India share historical ties through the Non-Aligned Movement.
 - Cooperation in sectors like healthcare, technology, and education under the **India-Africa Forum Summit**.

Contemporary Issues

- **Economic Diversification:** Reducing reliance on gold and cocoa.
- **Youth Employment:** Harnessing the demographic dividend.
- **Environmental Concerns:** Deforestation, illegal mining (galamsey), and climate change.
- **Political Stability:** Consolidating democratic institutions and addressing corruption.

Decoding national anthem controversy

Syllabus: GS-2: Indian Polity – Conventions and Procedures in Assembly.

Context:

- On January 6, 2025, Tamil Nadu Governor R.N. Ravi walked out of the Legislative Assembly, refusing to deliver the customary address.
- **Reason:** Claimed that the national anthem was not played before his scheduled address.
- **Historical Note:** A similar incident occurred in 2024 when the Governor refused to read the address citing the same reasons.

Tamil Nadu Raj Bhavan's Stand

- **Allegation:** The Constitution and the National Anthem were disrespected in the Tamil Nadu Assembly.
- **Fundamental Duties:** The Raj Bhavan cited Article 51(A)(a) of the Constitution, emphasizing respect for the national anthem as a fundamental duty.
- **Governor's Action:** Left the House in protest, describing the omission as a "brazen disrespect."

Tamil Nadu Government's Defence

- **State Anthem:** As per convention, *Tamil Thai Vazhthu* is played at the beginning of the Governor's address.
- **National Anthem:** Played at the conclusion of the Governor's address.
- **Origin of Practice:** Introduced in July 1991 during the AIADMK government led by Jayalalithaa.

National Anthem Practices in Other States

- **Diverse Practices:**
 - Nagaland: National anthem was played for the first time in February 2021.
 - Tripura: First played in March 2018.
- **Conclusion:** Practices vary across states, and there is no uniform rule.

Protocol in Parliament

- **Before Address:** National anthem is played when the President arrives and takes their seat on the dais.
- **After Address:** National anthem is played again as the President leaves the Central Hall.
- **Note:** Strict adherence to protocol ensures respect for national symbols.

Constitutional Provisions

- **Article 51(A)(a):** It is the duty of every citizen to:
 - Abide by the Constitution.
 - Respect the national flag and national anthem.

Ministry of Home Affairs Guidelines

- **Occasions for Playing National Anthem:**
 - During the unfurling of the national flag.
 - On cultural or ceremonial occasions.
 - During the arrival or departure of the President.

Judicial Interpretation

- **Madras High Court Ruling (2019):**
 - A petition to mandate the national anthem at official functions was dismissed.
 - Court emphasized that playing the national anthem is a customary practice, not a constitutional mandate.

Key Takeaways

- **Institutional Harmony:** Importance of maintaining decorum between constitutional offices.
- **Federal Dynamics:** Highlights interplay between the Governor and State government.
- **Respect for National Symbols:** Role of conventions and practices in ensuring adherence to constitutional values.
- **Judicial Insights:** Courts prioritize established legal mandates over customary practices.

Human Metapneumovirus

Syllabus: GS-3: General Science – diseases.

Context:

- India has confirmed eight cases of Human Metapneumovirus (HMPV) infections in children, with cases identified in Mumbai, Bengaluru, Nagpur, Tamil Nadu, and Ahmedabad.

- This development comes amidst a surge in respiratory illnesses in China. However, Union Health Minister J.P. Nadda has assured the public that the situation is under control and there is no risk of a COVID-19-like outbreak, as reports.

Introduction

- Human Metapneumovirus (HMPV) is a member of the Metapneumovirus genus within the Paramyxoviridae family.
- Discovered in 2001, HMPV is a major cause of respiratory infections in humans, particularly in young children, the elderly, and immunocompromised individuals.
- It shares similarities with respiratory syncytial virus (RSV), both causing similar clinical presentations in respiratory diseases.

Virus Structure

- **Genome:** Negative-sense single-stranded RNA.
- **Capsid:** Helical.
- **Envelope:** Lipid membrane with glycoproteins (fusion (F) protein and attachment (G) protein) that aid in cell entry.

Epidemiology

- **Global Prevalence:** HMPV is found worldwide, with infections occurring year-round, though they peak in the winter and early spring.
- **Transmission:** Primarily spread through respiratory droplets, direct contact, and fomites.
- **Incidence:** It is a common cause of respiratory infections, including bronchiolitis, pneumonia, and upper respiratory tract infections.

Clinical Features

- **Symptoms:** Symptoms are similar to other respiratory viruses and can range from mild to severe:
 - **Mild cases:** Common cold-like symptoms, including cough, sore throat, runny nose, and fever.
 - **Severe cases:** Respiratory distress, wheezing, pneumonia, and bronchiolitis, especially in infants and elderly people.
- **Risk Factors for Severe Disease:**
 - Children under 5 years old.
 - Elderly individuals (over 65 years).

- Immunocompromised patients (e.g., organ transplant recipients, HIV/AIDS patients).
- Pre-existing lung conditions (e.g., asthma, chronic obstructive pulmonary disease).

Pathogenesis

- HMPV primarily infects the epithelial cells of the respiratory tract.
- The virus enters host cells through the interaction of its F protein with host cell receptors, leading to fusion and viral replication.
- It causes inflammation in the upper and lower respiratory tracts, contributing to airway obstruction and respiratory symptoms.

Diagnosis

- **Clinical Diagnosis:** Based on symptoms and patient history, especially in at-risk populations.
- **Laboratory Diagnosis:**
 - **RT-PCR (Reverse Transcription-Polymerase Chain Reaction):** Most accurate method for detecting viral RNA.
 - **Serological Tests:** Detect antibodies against HMPV.
 - **Viral Culture:** Rarely used, as it is time-consuming and complex.
 - **Immunofluorescence:** Used in some settings for rapid detection of viral antigens.

Treatment and Management

- **Symptomatic Treatment:** No specific antiviral treatment for HMPV; management involves:
 - **Supportive Care:** Oxygen therapy, hydration, and fever control.
 - **Bronchodilators:** To relieve wheezing and bronchospasm.
 - **Hospitalization:** May be required for severe cases, particularly in young children or the elderly.
- **Antiviral Therapy:** Research into antivirals like ribavirin has been inconclusive. No FDA-approved specific antiviral drugs for HMPV as of now.

Prevention

- **Vaccination:** Currently, no vaccine is available for HMPV. Efforts are ongoing in the research of potential vaccines.

➤ **Hygiene Measures:**

- Hand hygiene (regular washing with soap or use of alcohol-based sanitizers).
- Avoidance of close contact with infected individuals.
- Disinfection of surfaces and avoiding touching the face.

Challenges in Control and Surveillance

- **Asymptomatic and Mild Cases:** Many people infected with HMPV do not exhibit symptoms, leading to underreporting and challenges in surveillance.
- **Co-infection with Other Viruses:** HMPV often co-occurs with other respiratory viruses like RSV, influenza, and rhinovirus, complicating diagnosis and treatment.

AI and deepfake concerns

Syllabus: GS-3: Science and Technology–Ethical and Legal concerns.

Context:

- X's Grok AI revives concern about deepfakes ahead of Delhi Assembly election.

Introduction

- AI-generated content, including deepfakes, is increasingly being used in political campaigns, satire, and commentary.
- Recent incidents, such as the use of deepfakes by the Aam Aadmi Party (AAP) and responses from the Bharatiya Janata Party (BJP), highlight the growing influence of AI in shaping political narratives.

Key Incidents

- **AAP's Deepfake of B.R. Ambedkar**
 - AI-generated video of Ambedkar blessing former Delhi CM Arvind Kejriwal.
 - Triggered political and public discourse on ethical use of AI in politics.
- **Deepfake Parody on X (formerly Twitter)**
 - Example: An account, @The_Nehru, uses AI to generate satirical images of Jawaharlal Nehru.
 - Popular posts mock political blame games and gained over 20,000 followers.

- Creator claims inspiration from parliamentary debates where Nehru was blamed for various issues.

➤ **Deepfake Misuse: Misinformation**

- Example: AI-generated image of Rahul Gandhi resembling George Soros, labeled as Gandhi's "mentor."
- Highlights potential misuse of deepfakes for disinformation campaigns.

Ethical and Social Concerns

➤ **Satire vs. Misinformation**

- Increasing difficulty in distinguishing satire from genuine news.
- Concerns about lack of accountability in content creation and dissemination.

➤ **Flooding of Content**

- AI tools enable rapid generation of content, leading to information overload.
- Risk of satire or meaningful commentary being lost in the "noise."

➤ **Hate Speech and Misinformation**

- Blurring lines between humor, misinformation, and hate speech.
- Potential for such content to fuel polarization and distrust.

AI Platforms and Policies

➤ **Diverging Approaches**

- **Grok (X's AI):** Allows unrestricted generation of political synthetic imagery and content.
- **Other AI Platforms (Meta, OpenAI):** Restrict responses to politically sensitive queries.

➤ **Examples of Platform Impact**

- Google Gemini faced criticism for responses perceived as politically inappropriate.
- Grok remains largely unregulated, providing "unvarnished" political responses.

Broader Implications

➤ **Cumulative Effects of Disinformation**

- Disinformation campaigns rely on the repeated appearance of misleading content across platforms.
- Potential to influence public opinion and disrupt democratic processes.

➤ **Political Impact**

- AI content shaping narratives in elections, influencing voter perceptions.
- Risk of deepfakes undermining trust in political discourse.

Way Forward

➤ **Regulation and Oversight**

- Establish guidelines for ethical use of AI in political campaigns.
- Platforms must take responsibility for restricting harmful content.

➤ **Media Literacy**

- Educate the public to critically evaluate AI-generated content.

➤ **Technological Solutions**

- Develop tools to detect and flag deepfakes effectively.

Conclusion

The use of AI in political campaigns presents both opportunities and challenges. While it can enhance creativity and engagement, unchecked use poses risks of misinformation, polarization, and erosion of trust in democratic processes. A balanced approach with regulation and awareness is essential to harness AI's potential responsibly.

Cancel Coal Case

Syllabus: GS-3; Biodiversity Conservation

Context

- The landmark ruling by South Africa's High Court in Pretoria against the government's plan to expand coal-fired power generation marks a significant step in global climate litigation and environmental justice.

Key Highlights of the Ruling

- **Cancellation of Coal Power Expansion:** The government's plan to add 1,500 MW of coal power to the national grid was deemed unconstitutional and unlawful.
- **Violation of Constitutional Rights:** The court emphasized that the government failed to consider the adverse effects on the environment and public health, particularly children's rights, as enshrined in South Africa's Constitution.
- **Focus on Intergenerational Equity:** The ruling highlighted the obligation to protect the interests of future generations and the "unborn," showcasing a long-term perspective in governance.

The 'Cancel Coal' Case

- Initiated by youth-led organizations like the African Climate Alliance, the Vukani Environmental Justice Movement, and the Groundwork Trust.
- Represented by the Centre for Environmental Rights, these groups argued that the plan violated constitutional provisions on environmental protection and children's welfare.

South Africa's Energy Landscape

- **Coal Dependency:** About 71% of South Africa's energy comes from coal, making it the 16th largest emitter of greenhouse gases globally.
- **Paris Agreement Commitments:** South Africa plans to cut 350-420 MtCO₂e of greenhouse gas emissions by 2030 and achieve net-zero by 2050.
- **Legislative Support:** The Climate Change Act signed into law in 2024 includes mandates to reduce emissions.

Environmental and Health Implications

- A study in 2019 revealed that emissions from coal-fired plants disproportionately harm children, causing respiratory issues and developmental problems.
- The court's reliance on Section 28 of the Constitution, which protects children against neglect and degradation, underscores the direct link between environmental harm and human rights.

Global Context and Environmental Justice

- The case exemplifies the growing recognition of environmental justice and the role of civil society in climate litigation.

- In India, similar judicial and policy efforts reflect a shift toward renewable energy, aligning with global trends and the Paris Agreement.

Implications of the Judgment

- **Setting a Precedent:** Courts worldwide are increasingly holding governments accountable for decisions that impact climate and intergenerational equity.
- **Role of Civil Society:** The judgment underscores the importance of grassroots organizations and citizen activism in driving systemic change.
- **Holistic Governance:** Policymakers are urged to consider long-term environmental and social consequences over short-term economic gains.

Conclusion

- The South African High Court's decision reaffirms the critical role of judiciary and civil society in addressing the climate crisis.
- It signals a shift toward prioritizing sustainable development, intergenerational equity, and public health over immediate economic interests.
- The ruling not only bolsters global climate litigation efforts but also sets a benchmark for balancing environmental protection with socio-economic development.