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# Current Affairs - 26 December 2024

## **GULF COOPERATION COUNCIL (GCC)**



India and Kuwait have strengthened their relationship into a strategic partnership during Prime Minister Narendra Modi's landmark visit, the second by an Indian Prime Minister since 1981.

This visit highlights a strong commitment to trade, defense, and cooperation.

Gulf Cooperation Council (GCC) is a regional political and economic alliance, established in 1981. It was formed in response to escalating regional tensions, particularly the Iranian Revolution (1979) and the Iran-Iraq War (1980–1988).

• It comprises six Arab states: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE).

## **Key Features of the GCC:**

- The GCC countries together hold **almost half of the world's oil reserves**, making them vital players in the global energy market.
- The GCC convenes yearly summits to discuss strategies for **cooperation and regional** stability.

## **Organizational Structure of the GCC:**

- Supreme council:
  - o **Highest authority**: Composed of the heads of state from all member countries.
  - Decision-making: Decisions are made through unanimous approval.
  - Presidency rotation: The presidency rotates annually, based on the alphabetical order of member states.
- Ministerial council:
  - o Composed of **foreign ministers** or their representatives from member states.
  - o **Role**: Proposes policies and implements decisions of the Supreme Council.
  - o **Meetings**: Held every three months.
- Secretariat general:





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- Acts as the administrative arm of the GCC.
- o **Functions**: Monitors policy implementation and arranges meetings.
- Headquarters: Located in Riyadh, Saudi Arabia.

#### India and the GCC:

- Largest regional trading partner: The GCC is India's most significant regional trading bloc. Bilateral trade (FY 2023-24):
  - Total trade: USD 161.59 billion.
  - o India's exports: **USD 56.3 billion**.
  - o India's imports: **USD 105.3 billion**.
  - The UAE is India's 3rd largest trading partner and 2nd largest export destination.
- Workforce and Remittances: Approximately 8.9 million Indian expatriates reside in GCC countries, forming 66% of all non-resident Indians (NRIs).
  - Indian expatriates contribute significantly to remittances, a vital income source for India.

#### **MAMMOTH**



Researchers in Siberia are conducting tests on a juvenile mammoth whose remarkably well-preserved remains were discovered in thawing permafrost after more than 50,000 years.

- Mammoths are member of an extinct species belongs to **elephantid genus Mammuthus.**
- They lived from the **Pliocene epoch** (from around 5 million years ago) into the **Holocene** at about 4,000 years ago.
- They existed in Africa, Europe, Asia, and North America.
- Features:
  - The various species of mammoth were commonly equipped with long, curved tusks.





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- They evolved a suite of adaptations for arctic life, including morphological traits such as **small ears** and **tails to minimize heat loss**, a thick layer of subcutaneous fat, **long thick fur**, and numerous sebaceous glands for insulation.
- o They also had large **brown-fat hump** like deposit behind the neck that may have functioned as a heat source and fat reservoir during winter.
- Mammoths are more closely related to living Asian elephants than African elephants.
- **IUCN Status:** Extinct

## **Key facts about Permafrost:**

- It is any ground—from soil to sediment to rock—that has **been frozen continuously for** a **minimum of two years** and as many as hundreds of thousands of years.
- It can extend down beneath the earth's surface from a few feet to more than a mile, covering entire regions, such as the Arctic tundra, or a single, isolated spot, such as a mountaintop of alpine permafrost.
- It can be found on land and below the ocean floor.

#### VIKSIT PANCHAYAT KARMAYOGI INITIATIVE



- It is part of the broader 'Prashasan Gaon Ki Aur' campaign.
- It aims to enhance the capacity and competence of

**Panchayati Raj Institutions** (PRIs) by equipping elected representatives and officials with the tools and knowledge required for effective governance and participatory planning.

- It is currently piloted in Odisha, Assam, Gujarat, and Andhra Pradesh.
- The initiative leverages **e-learning platforms**, **AI-powered chatbots**, and mobile apps to bridge knowledge gaps and enhance service delivery.
- This program aligns with the government's broader mission to decentralize governance and foster participatory decision-making at the grassroots level.





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• The initiative is expected to **create scalable models of citizen-centric governance**, enabling PRIs to drive equitable and sustainable development across rural India.

#### Other initiatives:

- New dashboard on the iGOT Karmayogi platform:
- It is designed to **empower ministries, departments**, and state administrators with advanced tools to monitor **user registrations, course completions**, and overall progress in capacity-building efforts.
- With customizable views and robust data filtration capabilities, the dashboard provides detailed insights to **improve decision-making and optimize training initiatives.**
- CPGRAMS Annual Report 2024:
- It provides a comprehensive review of the Centralized Public Grievance Redress and Monitoring System.
- The report showcases key achievements, including the resolution of over 25 lakh grievances annually and the implementation of the Grievance Redressal Assessment and Index (GRAI).

### PM LAYS FOUNDATION STONE OF KEN-BETWA PROJECT



It aims to transfer water from the Ken River to the
 Betwa River, both tributaries of the Yamuna.

- o The project includes a 221-km canal with a 2-km tunnel.
- The project also includes a 73.8-meter-high dam on Ken at Daudhan in Madhya
  Pradesh's Chhattarpur district.

#### Project Phases

- Phase-I: Construction of the Daudhan Dam complex, Low Level Tunnel, High Level Tunnel, Ken-Betwa Link Canal, and powerhouses.
- Phase-II: Construction of Lower Orr Dam, Bina Complex Project, and Kotha Barrage.





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### • Completion of project

 According to the Jal Shakti Ministry, the KBLP project is proposed to be implemented in eight years.

### • Regions Benefiting from the project

- The project will benefit the Bundelkhand region, which spans 13 districts in Uttar
  Pradesh and Madhya Pradesh. Key beneficiary districts include:
  - Madhya Pradesh: Panna, Tikamgarh, Chhatarpur, Sagar, Damoh, Datia,
    Vidisha, Shivpuri, and Raisen.
  - Uttar Pradesh: Banda, Mahoba, Jhansi, and Lalitpur.
- The project aims to address water scarcity in this drought-prone region, fostering development and paving the way for future river interlinking initiatives.

## • Benefits of the Project

- o **Irrigation:** Annual irrigation for 10.62 lakh hectares (8.11 lakh ha in Madhya Pradesh and 2.51 lakh ha in Uttar Pradesh).
- o **Drinking Water:** Supply for ~62 lakh people.
- **Power Generation:** 103 MW of hydropower and 27 MW of solar power.

#### **Environmental and social concerns**

#### • Environmental Impacts

Deforestation in Panna National Park: The project will result in large-scale deforestation, with around 98 sq km of the park submerged and 2–3 million trees felled.

#### • Threat to Wildlife:

- Tigers: The Daudhan Dam, located inside the Panna National Park, could undermine the successful tiger reintroduction program that revived the population after local extinction in 2009.
- o **Gharials and Vultures:** Likely to affect the Gharial population in the Ken Gharial Sanctuary and disrupt vulture nesting sites downstream.
- Hydrological Concerns:





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- IIT-Bombay scientists warn the project could reduce September rainfall by up to 12% due to disruptions in land-atmosphere feedback.
- Experts demand transparency in Ken River's hydrological data for a thorough review.

### Social Impacts

- Displacement: The dam will displace 5,228 families in Chhatarpur district and
  1,400 families in Panna district due to submergence and land acquisition.
- Inadequate Compensation: Protests have erupted over perceived inadequate compensation and minimal benefits for affected communities, particularly in Panna district.

## **Controversies and Criticism Surrounding the Project**

- Wildlife and Environmental Clearance: The Supreme Court's Central Empowered Committee (CEC) questioned the wildlife clearance and the project's economic viability.
- **Violation of Precedents:** The Union Environment Ministry approved construction within the core of the Panna Tiger Reserve, despite no precedent for such heavy infrastructure in national parks or tiger reserves.

### 20 YEARS AFTER INDIAN OCEAN TSUNAMI, INDIA IS BETTER PREPARED

- On December 26, 2004, a catastrophic event forever changed the way the world perceived natural disasters and preparedness.
- A 9.1 magnitude earthquake beneath the seabed off Indonesia unleashed a massive tsunami, devastating countries bordering the Indian Ocean including India, particularly the Andaman and Nicobar (A&N) Islands and the southern coastline.

### The Tragedy and its Immediate Aftermath

• In 2004, the lack of a robust warning system and limited public understanding of tsunamis resulted in immense human and material losses.





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- The tsunami struck the A&N Islands within 20 minutes of the earthquake, and its waves travelled to India's mainland and Sri Lanka within hours.
- With no early warning (EW) mechanism in place, people were caught off guard, exacerbating the scale of destruction.
- The tragedy starkly highlighted deficiencies in India's seismic monitoring network and reliance on international seismic data, which delayed critical warnings.

### **Institutional and Technological Responses**

- Establishment of Institutional Frameworks
  - One of the most critical institutional responses to the tsunami was the enactment of the Disaster Management Act of 2005, which created a legal framework for disaster preparedness, mitigation, and response.
  - This legislation led to the formation of the National Disaster Management Authority (NDMA), tasked with coordinating, and implementing disaster management plans across the country.
- Recognition of Collaboration between Civilian and Military Agencies
  - The tragedy also led to the recognition of the importance of collaboration between civilian and military agencies.
  - The Indian Armed Forces have since become key players in disaster response operations, offering logistical support, rapid mobilisation, and expertise during crises.
- Development of Early Warning Systems
  - o Technological advancements have been at the forefront of India's efforts to prevent a recurrence of the 2004 disaster.
  - The establishment of the Indian Tsunami Early Warning Centre (ITEWC) at the Indian National Centre for Ocean Information Services (INCOIS) in Hyderabad marked a significant leap forward.
- Sea Level Monitoring, Communication and Dissemination





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- Tide gauges and deep-ocean assessment and reporting of tsunamis (DART) buoys are deployed strategically across the Indian Ocean to monitor changes in sea level.
- Warnings are transmitted to government agencies, disaster management authorities, and even neighbouring countries under the UNESCO-led Intergovernmental Oceanographic Commission framework.
- India has assumed a leadership role in this regard, offering tsunami-related services to 26 Indian Ocean region countries.
- Enhancing Preparedness Through Technology
  - The introduction of the Common Alerting Protocol (CAP) has significantly improved the dissemination of warnings.
  - Alerts are sent to millions of mobile phones within minutes, using polygondrawn geographies to target affected areas accurately.
  - Moreover, plans to implement a modern cell broadcast system promise even greater reliability.
- Broader Applications of Technology
  - While these advancements focus on tsunamis, the technologies are being extended to address other hazards, including cyclones, lightning strikes, and Glacial Lake Outburst Floods (GLOFs).
  - The government's emphasis on multi-hazard risk mapping underscores a commitment to a comprehensive approach to disaster management.

## IMAGING ACTIVE HYDROTHERMAL VENTS



India's Deep Ocean Mission recently achieved a landmark by capturing high-resolution images of an active hydrothermal vent

4,500 meters below the Indian Ocean's surface.





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- Hydrothermal vents are **underwater hot springs** near tectonic plate boundaries, expelling hot water and minerals from beneath the Earth's crust into the ocean.
- They were first identified in **1977** near the **Galapagos Islands**, Ecuador.

#### **Formation**:

- Cold seawater (around 2°C) seeps through fissures in the oceanic crust near tectonic activity,
- The water then contacts hot magma, heating to temperatures up to 370°C or higher,
- Superheated water then resurfaces as mineral-rich hydrothermal fluids, forming vents and plumes.

### • Types:

- Black Smokers: Emit particle-laden fluids, primarily containing iron sulfides, forming black chimney-like structures
- White Smokers: Emit fluids rich in barium, calcium, and silicon, forming white chimneys

#### Significance of the Discovery for India:

- **Mineral Exploration**: Enhances India's capacity to explore and utilize deep-sea **hydrothermal sulfide fields**, vital for securing mineral resources.
- Support for Samudrayaan Mission: The findings strengthen India's ambitious Samudrayaan Mission, focusing on mineral extraction from the deep ocean.
- **Microbial Research**: Offers insights into chemosynthetic organisms, broadening knowledge of deep-sea biology and potential biotechnological applications.