



DAILY CURRENT AFFAIRS 03-01-2025

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Groundwater Resource Assessment Report 2024

Syllabus: GS-1: Resources – Ground Water

Context:

- The Dynamic Ground Water Resource Assessment Report for 2024 was released by the Union Minister of Jal Shakti, Shri CR Patil.

Groundwater Recharge and Extraction Data

- **Annual Groundwater Recharge:** 446.90 Billion Cubic Metres (BCM).
- **Extractable Groundwater Resource:** 406.19 BCM (after accounting for natural discharge).
- **Annual Groundwater Extraction:** 245.64 BCM.
- **Average Stage of Extraction:** 60.47%.

Assessment Units Classification

- **Total Units Assessed:** 6746.
 - **Safe Units:** 4951 (73.4%).
 - **Semi-Critical Units:** 711 (10.5%).
 - **Critical Units:** 206 (3.05%).
 - **Over-Exploited Units:** 751 (11.1%).
 - **Saline Units:** 127 (1.8%).

Improvements in Groundwater Conditions

- **Increase in Groundwater Recharge:** Enhanced by recharge from water bodies and conservation efforts.
- **Improved Units:** 128 units showed better groundwater conditions compared to 2023.
- **Reduction in Over-Exploited, Critical, and Semi-Critical Units:** Indicates effective management practices.

Key Highlights and Trends

- **Increase in Recharge Since 2017:**
 - Groundwater recharge increased by 15 BCM.
 - Recent recharge improvements (2023-2024): +0.39 BCM.
- **Decrease in Extraction:**
 - Extraction reduced by 3 BCM since 2017.

➤ **Enhanced Conservation Efforts:**

- Recharge from tanks, ponds, and conservation structures has steadily risen.

➤ **Safe Units Statistics:**

- Percentage of safe units rose from 62.6% (2017) to 73.4% (2024).

➤ **Over-Exploited Units Statistics:**

- Declined from 17.24% (2017) to 11.13% (2024).

Significance for Water Resource Management

- Data underscores the importance of sustainable groundwater practices.
- Highlights the effectiveness of water conservation initiatives.
- Serves as a decision-making tool for stakeholders in water resource management.

Carter Doctrine

Syllabus: GS-2: International Relations – Theories and Doctrines.

Context:

- Jimmy Carter's lasting Cold War legacy: His human rights focus helped dismantle the Soviet Union.

What is the Carter Doctrine?

- The Carter Doctrine is a U.S. foreign policy proclamation asserting that the United States would use military force, if necessary, to protect its national interests in the Persian Gulf.

Key Details

- **Announced on:** January 23, 1980, during President Jimmy Carter's State of the Union Address.
- **Originated by:** President Jimmy Carter in response to the Soviet invasion of Afghanistan in December 1979.
- **Focus Area:** The Persian Gulf, a region critical for global oil supplies and U.S. strategic interests.

Context and Rationale

- **Geopolitical Environment:** The Cold War rivalry and the Soviet Union's increasing influence in Afghanistan and its potential threat to the Persian Gulf.

- **Strategic Importance:** The Persian Gulf's oil reserves were vital for global economic stability and U.S. energy security.

Key Impacts on Global Affairs

- **Deterrence of Soviet Influence:**
 - Aimed to counter potential Soviet expansion into the Persian Gulf.
 - Signaled strong U.S. commitment to safeguarding its strategic and energy interests.
- **Strengthened Military Preparedness:**
 - Led to enhanced U.S. military presence in the Persian Gulf, including basing agreements with regional allies like Saudi Arabia.
 - Marked a shift in U.S. defense priorities toward Middle Eastern security.
- **Escalation of Cold War Tensions:**
 - Intensified the geopolitical rivalry between the U.S. and the Soviet Union.
 - Strengthened U.S. alliances in the Middle East, aligning regional powers against Soviet expansion.
- **Foundation for Future Policies:**
 - Set the stage for U.S. military interventions in the Gulf War (1991) and the Iraq War (2003).
 - Reinforced America's long-term strategic influence in the Middle East.

Trinidad and Tobago

Syllabus: GS-2: International Events

Context:

- The government of Trinidad and Tobago has declared a state of emergency due to increase in violence.

Context of Violence

- **Surge in Murders:**
 - December 2024: At least 67 fatalities.
 - Annual death toll: 623 (highest since 2013).
- **Gang-Related Violence:**

- Targeted shooting of a gang leader outside a police station.
- Retaliatory attacks leading to multiple deaths.

➤ **Weapons:**

- Use of high-calibre firearms by gangs highlighted by the National Security Minister.



Reasons for Emergency Declaration

➤ **Threat to Public Safety:**

- Escalating violence involving high-velocity weapons.

➤ **Potential Reprisal Attacks:**

- Attorney-General cited risks of widespread retaliation.

Emergency Measures Implemented

➤ **Enhanced Police Powers:**

- Searches without warrants allowed.
- 48-hour detention period for suspects under new regulations.

➤ **Focus:**

- Target illegal firearms and explosives possession.

Impact on Public Life

➤ **No Curfews or Bans:**

- Public gatherings and celebrations (e.g., New Year's fireworks, Carnival) to proceed as planned.

➤ **Balance:**

- Emergency measures aim to ensure public safety while maintaining cultural festivities.

Historical Context of Emergencies

- Previous declarations:
 - **2014, 2011, 2021** - Addressed spikes in violence or public health crises.
- Highlights recurring challenges with crime and security in the region.

Future Considerations

- **Parliament Review:**
 - To convene within 15 days to assess and decide on emergency extension.
- **Legal Oversight:**
 - Tribunal to ensure accountability in detentions and enforcement of measures.

Map Work



Air Independent Propulsion System

Syllabus: GS-3: Science and Technology –Defence

Context:

Ministry of Defence recently concluded contracts worth ₹2,867 crore for integrating an indigenously developed Air Independent Propulsion (AIP) module and electronic heavyweight torpedoes on Scorpene-class submarines.

About Air Independent Propulsion (AIP) System

- **Definition:** Technology enabling diesel-electric submarines to operate underwater without surfacing or using a snorkel for oxygen.
- **How it Works:**
 - Generates electricity underwater using **fuel cells** or other systems.
 - Carries **liquid oxygen** and fuel such as diesel, methanol, or hydrogen.
 - Power generation through:
 - **Electrochemical cells** (e.g., fuel cells).
 - **Heat engines.**
- **Features:**
 - **Extended Underwater Endurance:** Operates longer without surfacing.
 - **Stealth Capability:** Reduces vulnerability to detection.
 - **Efficiency:** Uses compact systems like fuel cells for enhanced safety and performance.

About Scorpene-Class Submarines

- **Overview:**
 - Series of advanced **diesel-electric attack submarines** designed for stealth, endurance, and maritime defence.
 - Built under **Project-75** in collaboration with **French Naval Group** since 2005.
- **Features:**
 - **Modern Sensors and Weapons:** Equipped with state-of-the-art systems.
 - **Modular Design:** Supports upgrades such as AIP modules and advanced torpedoes.

➤ **Fleet:**

- **Commissioned Submarines:** INS Kalvari, INS Khanderi, INS Karanj, INS Vela, INS Vagir.
- **In Trials:** INS Vagsheer.

Significance

- Enhances India's underwater warfare capability.
- Boosts indigenization in defence technology.
- Strengthens maritime security in strategic waters.

Wayanad Landslides Declared Severe Disaster

Syllabus: GS-3: Disaster Management.

Context:

The recent declaration of the Wayanad landslides as a disaster of "severe nature" underscores the gravity of the event and its widespread impact on life, property, and the environment.

What are Severe Natural Disasters?

Severe natural disasters are catastrophic events with significant social, economic, and environmental repercussions.

➤ **Causes:**

- **Natural:** Earthquakes, cyclones, landslides, floods, etc.
- **Human-induced:** Industrial accidents, deforestation, urbanization, etc.

➤ **Impacts:**

- **Social:**
 - Loss of lives.
 - Vulnerability of marginalized groups (e.g., women, elderly, children).
 - Displacement of communities.
- **Economic:**
 - Destruction of critical infrastructure.
 - Loss of livelihoods.

- **Environmental:**
 - Deforestation.
 - Habitat destruction.
 - Soil erosion.

Implications of Declaring a Disaster of Severe Nature

- **National-Level Support:**
 - State governments can access resources and assistance from the Centre.
- **Funding Mechanisms:**
 - **National Disaster Response Fund (NDRF):** Provides financial assistance for immediate relief and recovery.
 - **Calamity Relief Fund (CRF):** A 3:1 fund-sharing mechanism between the Centre and states.
 - **National Calamity Contingency Fund (NCCF):** Central funding for additional relief when CRF is inadequate.
- **Loan Relief:**
 - Affected individuals may receive relief in loan repayment or concessional credit options.

Background of the Wayanad Landslides

- **Occurrence:** July 30, 2024.
- **Location:** Primarily affected Chooralmala and Mundakkai in Wayanad district.
- **Triggers:** Heavy rainfall led to massive landslides.
- **Impact:**
 - Over 200 fatalities.
 - Thousands displaced.
 - Extensive environmental damage.

Kerala's Rehabilitation Plan for Wayanad Landslide Victims

The Kerala government has initiated a comprehensive rehabilitation plan, focusing on rebuilding lives and livelihoods.

Key Aspects of the Plan

- **Sustainable Townships:**
 - **Locations:**

- Elstone Estate (Kalpetta Municipality).
- Nedumbala Estate (Meppadi Panchayat).
- **Features:**
 - Built with slope analysis for stability.
 - Amenities: Recreational spaces, health centers, schools, anganwadis, playgrounds, electricity, water, and sanitation.
- **Land Allocation:**
 - **Elstone Estate:** 5 cents per family.
 - **Nedumbala Estate:** 10 cents per family.
- **Community Support Infrastructure:**
 - Includes commercial spaces, sports clubs, and community centers.
- **Livelihood Restoration:**
 - Based on a micro-plan survey of 1,084 families by Kudumbashree:
 - 192 families opted for agriculture.
 - 79 for animal husbandry.
 - 1,034 for micro-enterprises.
 - 585 for other income-generating activities.
- **Special Focus on Vulnerable Groups:**
 - Prioritized support for women-headed households, elderly, widows, and children.
- **Drone Survey and Legal Framework:**
 - Drone surveys identified suitable land.
 - Legal approvals obtained for land acquisition.
- **Timeline:**
 - Final list of beneficiaries to be published by January 25, 2025.
 - Rehabilitation timeline to be disclosed within 2-3 weeks.

Conclusion

The declaration of the Wayanad landslides as a disaster of “severe nature” emphasizes the need for swift and sustainable rehabilitation efforts. Kerala’s comprehensive plan reflects a balance between immediate relief and long-term resilience, offering a template for addressing similar disasters in the future.

03 January 2024
