



**UPSC
Mentorship**
A Unit of Mentorship India

DAILY CURRENT AFFAIRS

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SOURCES



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GS I

1. Himachal flood toll mounts to six; 47 people still missing

Source: The Hindu

Context: The death toll in separate incidents of cloudbursts and flash floods across Himachal Pradesh rose to six, even as rescue and search operations continued on a war footing.

Introduction: Himachal Pradesh has been grappling with severe weather conditions, resulting in a series of cloudbursts and flash floods that have claimed six lives as of Friday. Rescue and relief operations are underway to address the impact of heavy rains that have led to overflowing rivers and widespread destruction.

Current Situation: In the districts of Shimla, Mandi, and Kullu, 47 people are reported missing, adding urgency to ongoing search efforts. So far, 55 individuals have been successfully evacuated, while 27 remain stranded at various locations. Chief Minister Sukhvinder Singh Sukhu has taken charge of the situation, visiting the affected areas in Shimla district to assess the relief and rehabilitation measures.

Government Response: To support the affected families, the Chief Minister announced immediate financial aid of ₹50,000 per family. Additionally, ₹5,000 will be provided per month for three months to help them secure temporary accommodation. The government is committed to ensuring that relief reaches those in need swiftly and effectively.

Extent of Damage: The heavy rains have caused substantial damage in the Shimla, Mandi, and Kullu districts, with multiple incidents of landslides and road blockages disrupting vehicular traffic across the state. Key infrastructure, including national and state highways and bridges, has suffered severe damage, resulting in significant economic losses.

Floods and Climate Change:

Floods are increasingly becoming a regular occurrence in various parts of India, and Himachal Pradesh is no exception. The **Intergovernmental Panel on Climate Change (IPCC)** has highlighted how climate change contributes to the frequency and intensity of extreme weather events, including floods. The warming atmosphere holds more moisture, leading to intense and unpredictable rainfall patterns, which in turn increase the risk of flash floods and landslides.

Key Data and Recommendations:

1. **Data Insights:**



- According to the National Disaster Management Authority (NDMA), India is among the countries most affected by floods, with over 40 million hectares of land prone to inundation.
- The Ministry of Environment, Forest and Climate Change has emphasised the importance of early warning systems and real-time data collection to mitigate the impact of such disasters.

2. Recommendations:

- **Enhance Infrastructure Resilience:** Strengthening infrastructure, such as roads and bridges, to withstand extreme weather conditions is crucial. This includes incorporating climate-resilient designs and materials in construction projects.
- **Community Awareness and Preparedness:** Educating local communities about flood risks and implementing community-based disaster management plans can significantly reduce vulnerability.
- **Investment in Early Warning Systems:** Developing advanced meteorological systems and ensuring timely dissemination of weather alerts can help minimise the impact of floods.
- **Sustainable Land Use Practices:** Encouraging afforestation and restricting deforestation in vulnerable areas can reduce the risk of landslides and soil erosion.
- **Policy Interventions:** Implementing and enforcing policies aimed at reducing greenhouse gas emissions will be essential in addressing the root causes of climate change and its associated impacts.

Conclusion: The recent incidents of flash floods and cloudbursts in Himachal Pradesh serve as a reminder of the growing challenges posed by climate change. Addressing these challenges requires a multi-faceted approach that involves enhancing infrastructure resilience, promoting sustainable practices, and strengthening community preparedness. By taking proactive measures, India can mitigate the impacts of climate change and safeguard its population from future disasters.

2. Centre reissues draft notification on eco sensitive areas in Western Ghats

Source: The Hindu

Context: Despite its six iterations, the draft notification is yet to become law as Gujarat, Maharashtra, Goa, Karnataka, Kerala, and T.N. have objected to specific places being classified as ecologically sensitive areas; panel formed to study the concerns of States

Western Ghats and Ecologically Sensitive Areas: The Ongoing Debate:

- Following the **catastrophic landslide in Wayanad, Kerala**, the Union government has, for the sixth time in a decade, issued a draft notification designating portions of the Western Ghats across six states as **Ecologically Sensitive Areas (ESAs)**. This designation aims to curb activities such as **quarrying, mining, and major infrastructure projects to protect the fragile environment of these regions.**
- The previous draft notification was released in July 2022, which proposed that 13 villages in Wayanad, across **Mananthavady, Sulthan Bathery, and Vythiri taluks**, be classified as part of an ESA.



- Despite multiple iterations, the draft has yet to become law due to objections from the **six affected states: Gujarat, Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu**. Kerala, in particular, expressed concerns that the notification could negatively impact agricultural plantations, hydroelectric projects, and could potentially cause a migration crisis given the state's high population density.

The Challenge of Consensus:

- In 2011, the **Gadgil Committee**, led by ecologist **Madhav Gadgil**, recommended **designating the entire Western Ghats region, covering 1,29,000 square kilometres, as ecologically sensitive**.
- After extensive consultations with residents, industrialists, and government officials, the **Gadgil panel proposed three broad zones—ESA 1, ESA 2, and ESA 3—with the first two zones having the strictest restrictions on economic activities**.
- However, due to resistance from the states, a second committee, headed by former ISRO Chairman, was formed, which halved the area proposed for protection.
- The **Kasturirangan Committee invited the states to delineate their own ESAs**.
- **Kerala was the first to comply**. Despite numerous meetings between the Centre and the states, reaching a consensus on the ESA boundaries within the Western Ghats has been challenging.

New Committee for Resolution:

- To address the concerns raised by the states, a new committee has been established to evaluate discrepancies or information gaps in the draft notification.
- The committee is tasked with balancing the conservation of the disaster-prone ecosystem with the rights, privileges, and developmental aspirations of the region.
- Although the committee has yet to submit its report, the current draft states that the committee is actively addressing the issues raised by the states regarding the correct names and areas of villages to be included in the ESA.

Recommendations from Committees and Institutions:

- **Gadgil Committee (2011)**: Advocated for comprehensive ecological protection of the Western Ghats, recommending strict regulations on developmental activities to preserve biodiversity and prevent natural disasters.
- **Kasturirangan Committee (2013)**: Suggested a balanced approach by reducing the protected area and allowing some developmental activities while maintaining ecological sensitivity.
- **National Green Tribunal (NGT)**: Emphasised the need for effective implementation of ESA guidelines to prevent environmental degradation and ensure sustainable development.
- **Intergovernmental Panel on Climate Change (IPCC)**: Highlighted the critical role of preserving biodiversity-rich areas like the Western Ghats in mitigating climate change impacts and promoting ecological resilience.

The ongoing deliberations reflect the complex interplay between environmental conservation and socio-economic development. As the region grapples with the challenges posed by climate change, finding a sustainable and equitable solution remains a priority.



GS II

3. Governor should be a bridge between Centre and State: PM

Source: The Hindu

Context: The Prime Minister, during the two-day Governors' Conference inaugurated by the President at Rashtrapati Bhavan, emphasised the pivotal role Governors can play as effective intermediaries between the Centre and State governments. In his address, the Prime Minister highlighted the significance of the Governor's role in the welfare of people, particularly in tribal areas, within the constitutional framework.

Strengthening Centre-State Relations:

- The Prime Minister urged **Governors to actively engage with both people and social organisations to support the underprivileged.**
- This engagement suggested- would help **build a robust bridge between the Centre and the State governments**, facilitating better implementation of welfare schemes and policies.

President's Remarks on Coordination:

- Stressed the importance of coordination among Central agencies and their interactions with States for the smooth functioning of democracy.
- **As constitutional heads of their respective States, Governors are uniquely positioned to enhance this coordination.** The agenda for the conference included issues critical to achieving national goals and fostering Centre-State relations.

Enhancing Educational and Judicial Systems:

- Highlighted the significance of **higher education** as a catalyst for individual and social change.
- Emphasised the **National Education Policies focus on improving accreditation and assessment systems in educational institutions**, urging Governors, as Chancellors of State universities, to contribute to these reforms.
- Additionally, mentioned the **implementation of new laws related to criminal justice, marking the beginning of a new era in the justice system.**

Vice President and Home Minister's Perspectives:

- **Governors to fulfil their constitutional duty by raising awareness about social welfare schemes and significant developments over the past decade.**
- Emphasising the government's **efforts to streamline Centre-State coordination** to reach more people with essential services.

Conference as a Platform for Ideas:

- The Conference of **Governors serves as a platform not only for the Constitutional heads of the States but also as a convergence point for ideas.**
- This meeting fosters dialogue and collaboration, enhancing the effectiveness of governance and policy implementation across the country.



Conclusion: Towards Seamless Coordination:

- The discussions and deliberations at the conference aim to **enrich participants' understanding and facilitate their roles in serving the public.**
- With a focus on **seamless coordination between the Centre and States**, the conference seeks to advance welfare initiatives and contribute to the broader national agenda.

Recommendations from Committees and Institutions:

- **Punchhi Commission on Centre-State Relations:** The commission recommends that Governors should act as impartial mediators, ensuring effective communication and coordination between the Centre and States.
- **NITI Aayog's Report on Governance:** Emphasises the need for a collaborative approach where Governors can facilitate the implementation of centrally sponsored schemes at the state level, ensuring that benefits reach the grassroots.
- **National Climate Change Action Plan:** Highlights the role of state governments, with the support of Governors, in implementing climate action strategies, promoting sustainable development, and enhancing resilience to climate impacts.

By embracing these roles and responsibilities, Governors can significantly contribute to strengthening Centre-State relations, fostering development, and ensuring effective governance across India.



GS III

4. India selects 2 crew members for Axiom-4 mission to ISS

Source: The Hindu

Context: The Indian Space Research Organisation (ISRO) has shortlisted two of its four trained Gaganyaan astronauts for the Axiom-4 mission to the International Space Station (ISS) in collaboration with the United States' National Aeronautics and Space Administration (NASA).

Axiom-4 Mission:

- NASA and Axiom Space, an American privately funded space infrastructure developer signed an order for the fourth private astronaut mission to the ISS, aiming to launch in August 2024 from Kennedy Space Center in Florida.
- The mission aims to dock with the ISS for a fourteen-day duration.
- Indian astronauts will receive training from NASA, international partners, and SpaceX, focusing on spacecraft systems and emergency preparedness, as part of India-US space cooperation goals.



Status of India's Gaganyaan Program:

- India's Gaganyaan human spaceflight is expected post-2025, with unmanned flights as precursors.
- The launch of manned flights follows two successful unmanned missions.

International Space Station (ISS):

- The ISS is a large, permanently crewed laboratory that orbits Earth, 400 kilometres above its surface. It is home to astronauts and cosmonauts, and serves as a unique science laboratory.
- Its research is expected to lead to advancements in many areas, including medicine, technology, science, and understanding the Earth and universe.
- It's a collaboration between 15 countries and five space agencies namely NASA (United States), Roscosmos (Russia), ESA (European Space Agency), JAXA (Japan Aerospace Exploration Agency), and CSA (Canadian Space Agency).
- An international crew of seven people live and work while travelling at a speed of 7.66 km/sec, orbiting Earth about every 90 minutes. In 24 hours, the space station makes 16 orbits of Earth, travelling through 16 sunrises and sunsets.
- Peggy Whitson set the US record for spending the most total time living and working in space for 665 days.
- The first parts of the ISS were sent and assembled in orbit in 1998. Since the year 2000, the ISS has had crews living continuously on board.



5. 'CCI procures 33 lakh bales cotton at MSP'

Source: The Hindu

Context: Cotton is a versatile crop that provides food, feed, and fibre for various uses, including textiles, cooking oil, and livestock feed. It is also a major source of income and employment for millions of farmers in India. However, in recent years, cotton production and yields have declined significantly, posing a challenge for the country's agriculture and textile sectors

Significance of Cotton for India:

- Cotton is one of the most important **commercial crops cultivated in India** and accounts for around **25% of the total global cotton production**.
- Due to its economic importance in India, it is also termed as **"White-Gold"**.
- In India, around **67% of India's cotton is grown on rain-fed areas and 33% on irrigated areas**.

Growing Conditions:

- Cotton cultivation necessitates a **hot and sunny climate with a long frost-free period**. It is most productive in **warm and humid climatic conditions**.
- Cotton can be **successfully grown in a range of soil types, including well-drained deep alluvial soils in northern regions, variable-depth black clayey soils in the central region, and mixed black and red soils in the southern zone**.
- While **cotton exhibits some tolerance to salinity, it is highly sensitive to waterlogging**, emphasising the importance of well-drained soils in cotton farming.

Species of Cultivated Cotton:

- India is the country to grow **all four species of cultivated cotton** *Gossypium arboreum* and *Herbaceum* (Asian cotton), *G. barbadense* (Egyptian cotton) and *G. hirsutum* (American Upland cotton).
- Majority of the cotton production comes from ten major cotton growing states, which are grouped into three diverse agro-ecological zones, as under:
 - **Northern Zone:** Punjab, Haryana and Rajasthan
 - **Central Zone:** Gujarat, Maharashtra and Madhya Pradesh
 - **Southern Zone:** Telangana, Andhra Pradesh, Karnataka and Tamil Nadu

Significance:

- Cotton, often likened to coconut, serves as a **source of three essential components**:
 - **Fibre:** The **white fluffy fibre or lint**, constituting about 36% of the raw unginned cotton, is the primary source for the textile industry. The rest is seed (62%) and wastes (2%) separated from the lint during ginning. **Cotton commands a two-thirds share in India's total textile fibre consumption**.
 - **Food:** Cottonseed contains 13% oil, which is commonly used for cooking and frying. **Cottonseed cake/meal is India's second-largest feed cake, following soybean**.
 - **Feed:** The leftover cottonseed cake, comprising 85% of the seed, is a valuable, protein-rich feed ingredient for livestock and poultry. **Cottonseed oil ranks as the country's third-largest domestically-produced vegetable oil, following mustard and soybean**.



What led to Rapid Increase and Subsequent Decline in Cotton Production in India?

- **Surge:**
 - Between 2000-01 and 2013-14, India witnessed a remarkable surge in cotton production, primarily attributed to **Bt (Bacillus thuringiensis)** technology.
 - Adoption of **genetically-modified (GM) cotton hybrids** with Bt genes, designed to combat the American bollworm insect pest.
 - It led to a surge in lint yields from 278 kg per hectare in 2000-01 to 566 kg per hectare in 2013-14.
 - A **corresponding increase in cottonseed oil and cake production.**
 - However, the gains achieved through Bt technology were short-lived. Post-2013-14, cotton production and yields began to decline.
- **Decline:**
 - The primary factor responsible for decline was the **emergence of the pink bollworm (Pectinophora gossypiella).**
 - When **pink bollworm (PBW)** larvae invade cotton bolls, it causes cotton plants to produce less cotton and the cotton produced is of lower quality.
 - Unlike the **polyphagous American bollworm**, PBW is monophagous, feeding mainly on cotton, which contributed to the development of resistance against Bt proteins.
 - Continuous cultivation of Bt hybrids led to PBW populations developing resistance, replacing susceptible ones.
 - In 2014, Gujarat experienced an unusual surge in PBW larvae survival on cotton flowers 60-70 days after planting. In 2015, Andhra Pradesh, Telangana, and Maharashtra also reported PBW infestations.
 - In 2021, even Punjab, Haryana and northern Rajasthan saw heavy infestation of the pest for the first time.

Other Issues Associated with the Cotton Sector in India:

- **Yield Fluctuations:** Cotton production in India can be quite unpredictable due to several factors. Limited access to irrigation systems, declining soil fertility, and erratic weather patterns, including unexpected droughts or excessive rainfall, contribute to the uncertainty surrounding cotton yields.
- **Smallholder Dominance:** The majority of cotton farming in India is carried out by small-scale farmers. These farmers often rely on traditional agricultural practices and have limited access to modern farming technologies, which in turn affects overall cotton production.
- **Limited Market Access:** A significant number of cotton growers in India face constraints in reaching markets and are compelled to sell their harvest at reduced rates to intermediaries.

6.PM inaugurates the 32nd International Conference of Agricultural Economists

Source: PIB

Context:The Prime Minister of India, Narendra Modi, inaugurated the 32nd International Conference of Agricultural Economists (ICAE) at the National Agricultural Science Centre (NASC) Complex in New Delhi. Held in India for the first time in 65 years, the conference focuses on the theme, "**Transformation Towards Sustainable Agri-Food Systems.**"



Prime Minister's Address:

- In his address, the Prime Minister welcomed delegates on behalf of India's vast agricultural community, which includes 120 million farmers, over 30 million women farmers, 30 million fishermen, and 80 million livestock farmers.
- Highlighted **India's rich agricultural heritage**, emphasising the importance of science and logic in traditional agricultural practices. He remarked, "**In the Indian agricultural tradition, priority has been given to science and logic.**"
- **India's agriculture is deeply rooted in ancient knowledge and practices**, such as those found in the 2,000-year-old treatise 'Krishi Parashar,' which outlines principles of farming.
- He underscored India's progress, stating, "**India is a food surplus country today,**" contrasting this with the past when India faced food security challenges that were of global concern. Today, India contributes significantly to global food and nutrition security.

India's Commitment to Global Agriculture:

- The Prime Minister reiterated India's commitment to global welfare, stating that the country's approach is guided by the philosophy of '**Vishwa Bandhu**' or **global friendship**.
- Highlighted India's role in addressing global challenges, mentioning initiatives like '**One Earth, One Family, One Future,**' which emphasises the interconnectedness of health and agriculture.
- Stressed the **importance of small farmers**, who constitute 90% of India's farming community, as key to the nation's food security.
- He noted that this model is relevant to other developing nations and mentioned India's advances in **sustainable and climate-resilient agriculture**. This includes the development of nearly 1,900 climate-resilient crop varieties in the past decade, such as water-efficient rice varieties and the promotion of black rice, which has medicinal properties.

Innovations in Agriculture:

Prime Minister also highlighted several innovative agricultural practices and technologies in India, such as:

- **Natural Farming:** Emphasising chemical-free farming and its positive impact on sustainability.
- **Digital Agriculture:** Initiatives like the Soil Health Card, solar farming, the e-NAM digital marketplace, and the PM Kisan Credit Card have modernised agriculture.
- **Water Management:** Over 90 lakh hectares have been brought under micro-irrigation in the past decade, significantly improving water usage efficiency.
- **Renewable Energy:** India is advancing towards a 20% ethanol blending target, benefiting both agriculture and the environment.

Also discussed the importance of digital technology in agriculture, such as the **PM Kisan Samman Nidhi**, which provides direct financial assistance to farmers. He highlighted the **campaign for digitising land records and promoting the use of drones in agriculture**.

Addressing Global Challenges:

- The Prime Minister acknowledged the **critical challenges of nutrition, water scarcity, and climate change**. He proposed millets, known as '**Shri Anna,**' as a superfood that requires minimal water while maximising production.
- He expressed India's willingness to share its millet basket with the world, highlighting the celebration of the International Year of Millets.



Conclusion and Future Directions:

Concluding his address, PM expressed optimism about the conference's potential to foster collaboration and learning among participants. He noted the significant presence of young people and anticipated fruitful discussions on connecting the world with sustainable agri-food systems.

Recommendations for Sustainable Agriculture:

- **IPCC Recommendations:** Emphasise the need for resilient agricultural systems to adapt to climate change and ensure food security.
- **FAO Guidance:** Promote sustainable practices that enhance productivity while preserving natural resources.
- **World Bank Insights:** Encourage investments in agricultural research and development to drive innovation and sustainable growth.

The conference highlights India's proactive approach to addressing global agricultural challenges and positions the country as a leader in sustainable agri-food systems.



Editorial, Ideas and Opinions

7. The five guidelines to a Dragon-Elephant tango

Source: The Hindu

Context: China and India are close neighbours. We learned from each other in ancient times, shared weal and woe in modern times, and have a common cause of rejuvenation today. China-India relations have become one of the most important bilateral relations.

Five Guidelines of 'Mutuals':

China and India share a historical bond as close neighbours. In ancient times, we learned from each other, and in modern times, we stood together through challenges. Today, both nations pursue a shared vision of national rejuvenation. China-India relations are among the most significant bilateral engagements in the world.

These "**Five Mutuals**" offer a roadmap for implementing the consensus reached by our leaders and should guide the interactions between our two great nations.

- **Mutual Respect: The Foundation of Bilateral Ties:**
 - Mutual respect is essential for the development of China-India relations. As the Indian saying goes, "jaisa des waisa bhes" (adapt to the environment you are in).
 - Both China and India must appreciate each other's development paths and global roles, promoting growth and prosperity across the region and the world.
- **Mutual Understanding: Strengthening the Bonds"**
 - Mutual understanding forms the basis of our relationship. Historically, our peoples have supported each other in struggles for independence and liberation.
 - China respects India's aspirations for national rejuvenation and supports its policy of strategic autonomy. Both nations, being among the largest developing countries, understand the monumental effort required to improve the lives of over 1.4 billion citizens.
 - We need to foster dialogue and communication across various fields to enhance mutual understanding and political trust, thereby consolidating the foundation for bilateral relations.
- **Mutual Trust: Key to Cooperation:**
 - Mutual trust is crucial for advancing China-India relations. In a volatile international landscape, China and India, as major developing nations, must avoid mutual suspicion and focus on shared growth.
 - We should view our relationship strategically, objectively perceive each other's intentions, and maintain the vision of being partners and opportunities for development.
 - Embracing peaceful coexistence and resolving disputes amicably will enable us to overcome geographical barriers and strengthen our friendship.



- **Mutual Accommodation: Navigating Differences:**

- Mutual accommodation ensures the growth of our bilateral ties. As neighbours with inevitable differences, it is vital to perceive these differences correctly and manage them appropriately.
- Drawing from our rich heritage of political wisdom, we can find effective ways to accommodate each other's core interests and resolve differences through dialogue, ensuring that our comprehensive relationship is not defined by disagreements or disrupted by singular incidents.

- **Mutual Accomplishment: Pursuing Common Goals:**

- Mutual accomplishment is the ultimate goal for China-India relations. As emerging economies at pivotal stages of development, both countries have vast common interests and opportunities for collaboration.
- The recent third plenary session of the **20th Central Committee of the Communist Party of China** has initiated a comprehensive deepening of reform, offering new opportunities to the world.
- India's vision of "**Viksit Bharat 2047**" aligns with China's aspirations for progress. We are committed to supporting each other's success, promoting Global South unity, and working towards a shared future for humanity.

Conclusion: A Vision for Peaceful Coexistence:

- The "**Five Mutu**als" build upon the Five Principles of Peaceful Coexistence, resonating with the "**mutual respect, mutual sensitivity, and mutual interests**" emphasised by Indian leadership.
- While challenges are normal in any relationship, as two ancient civilizations, China and India have the wisdom to navigate these challenges and steer bilateral relations towards a promising future. Our historical and cultural ties serve as a strong foundation for fostering deeper collaboration.
- The Prime Minister likened our relationship to "**two bodies with one spirit.**" A harmonious "**Dragon-Elephant Tango**" is not just a vision but a necessity for both nations. Guided by our leaders' strategic vision, it is confident that China and India can manage their relations wisely and create a pathway for peaceful coexistence and shared development.



In Brief

8. IAF's Chinook, MI-17 choppers join rescue operations in Uttarakhand; 5,000 evacuated

Source: The Hindu

Context: SDRF and NDRF are aiding in the efforts, says CM; 18,000 food packets, 35,000 water bottles distributed among pilgrims; Union Home Minister assures all possible help to the State.

The MI-17 helicopter, a robust and versatile military transport helicopter, is an integral part of the Indian Air Force (IAF) fleet. Known for its reliability and adaptability, the MI-17 is used for a variety of roles, including troop transport, logistics support, disaster relief, and medical evacuation. It has played a crucial role in both military and humanitarian operations.

Key Features of MI-17 Helicopters:

- **Design and Capabilities:** The MI-17 helicopter, an upgraded version of the MI-8, is manufactured by Kazan Helicopters, a subsidiary of the Russian Helicopters. It is known for its enhanced engine power, extended operational range, and ability to operate in diverse climates and terrains. The helicopter is equipped with advanced avionics, a night vision-compatible cockpit, and can carry up to 36 troops or 4,000 kg of cargo.
- **Multi-role Functionality:** The MI-17 can perform various missions, including troop and weapon transport, aerial reconnaissance, fire support, and search and rescue operations. Its versatility makes it suitable for both combat and civilian purposes, such as relief and rescue missions during natural disasters.
- **Technical Specifications:**
 - **Maximum Speed:** 250 km/h
 - **Range:** Approximately 800 km with internal fuel
 - **Service Ceiling:** 6,000 metres
 - **Engines:** Equipped with twin VK-2500 engines, providing increased power and fuel efficiency

9. Krishna Raja Sagar (KRS) dam

Source: Economic times

Context: Karnataka has begun releasing Cauvery water to Tamil Nadu from the Krishna Raja Sagar (KRS) dam and Kabini reservoir, following a directive from the Cauvery Water Management Authority (CWMA).

The Krishna Raja Sagar (KRS) Dam, located in the Mandya district of Karnataka, India, is a significant piece of engineering and a crucial component in the region's water management and agriculture.



Constructed across the Cauvery River, it serves multiple purposes, including irrigation, drinking water supply, and hydroelectric power generation.

Key Features of the KRS Dam:

- **Location:** The dam is situated near the town of Srirangapatna in Mandya district, approximately 19 km from Mysore city.
- **Dimensions:** The KRS Dam stands 39 metres high and extends over a length of 8600 feet (2621 metres). It is a gravity dam constructed using stone masonry.
- **Reservoir Capacity:** The dam forms the Krishna Raja Sagara reservoir, which has a total storage capacity of about 49.45 TMC (thousand million cubic feet).

Significance of the KRS Dam:

- **Irrigation:** The KRS Dam is a vital source of irrigation for the fertile plains of the Mandya and Mysore districts, supporting the cultivation of paddy, sugarcane, and other crops across vast tracts of land.
- **Water Supply:** It provides drinking water to several cities, including Mysore and Bangalore, thereby supporting the domestic and industrial water needs of these urban centres.
- **Hydroelectric Power:** The dam's hydroelectric plant generates electricity, contributing to the energy needs of the region.



Daily Quiz

Q1. Which of the following is NOT a common impact of flash floods?

- Soil erosion
- Groundwater recharge
- Infrastructure damage
- Loss of life and property

Q2. Consider the following statements regarding the Mi-17 helicopter:

- The Mi-17 helicopter is primarily used for civilian transportation purposes.
- It is equipped with advanced avionics and can perform operations in various weather conditions.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Q4. Consider the following statements regarding the 32nd International Conference of Agricultural Economists (ICAE):

- The 32nd International Conference of Agricultural Economists was held in India for the first time.
- The theme of the conference was "Transformation Towards Sustainable Agri-Food Systems."
- The conference emphasised India's role in providing global solutions for food and nutrition security.

Which of the statements given above is/are correct?

- 1 and 2 only
- 2 and 3 only
- 1 and 3 only
- 1, 2, and 3

Q5. Consider the following statements regarding cotton:

- India is one of the largest producers of cotton in the world.
- Cotton is primarily grown in regions with high rainfall and humidity.

Q3. Consider the following statements regarding the Krishna Raja Sagar (KRS) Dam:

- The Krishna Raja Sagar Dam is built across the Cauvery River in the state of Karnataka.
- The dam was designed by Sir M. Visvesvaraya and was completed in the early 20th century.
- The reservoir created by the dam is primarily used for hydroelectric power generation.

Which of the statements given above is/are correct?

- 1 and 2 only
- 2 and 3 only
- 1 and 3 only
- 1, 2, and 3

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Q6. Consider the following statements regarding the Minimum Support Price (MSP) in India:

- MSP is announced for both food crops and non-food crops.
- The Commission for Agricultural Costs and Prices (CACP) recommends MSP to the Government of India.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2



Q7. Consider the following statements regarding the Western and Eastern Ghats in India:

1. The Western Ghats run parallel to the western coast of India, whereas the Eastern Ghats run parallel to the eastern coast.
2. The Western Ghats are characterised by a higher elevation and receive more rainfall compared to the Eastern Ghats.
3. The Western Ghats are known for their rich biodiversity and are classified as a UNESCO World Heritage site, while the Eastern Ghats are less recognized for their biodiversity.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. 1, 2, and 3

Q8. Consider the following statements regarding Eco-Sensitive Zones (ESZs) in India:

1. Eco-Sensitive Zones are designated areas around protected wildlife sanctuaries and national parks to regulate human activity and minimise ecological disturbances.
2. The Gadgil Committee recommended that the entire Western Ghats be declared as Eco-Sensitive Zones, while the Kasturirangan Committee proposed a reduced area for ESZs.
3. ESZs have no restrictions on agricultural activities, and local governments have full

autonomy to decide the level of restrictions imposed.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2, and 3

Q9. The Axiom-4 mission, recently featured in the news, is associated with which of the following countries?

- A. United States
- B. Russia
- C. China
- D. India

Q10. Consider the following statements regarding Ecologically Sensitive Zones (ESZs):

1. ESZs are areas identified for conservation to prevent ecological damage from human activities.
2. The establishment of ESZs is primarily determined by individual state governments, without central oversight.
3. The Gadgil Committee and Kasturirangan Committee have both made recommendations regarding the delineation of ESZs in the Western Ghats.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. 1 and 3 only
- D. 2 and 3 only



Solutions

1. The correct answer is: B

Explanation:

- **Flash Floods:** Flash floods are sudden and intense floods that occur within a short period, often due to heavy rainfall or rapid snowmelt.
- **Common Impacts of Flash Floods:**
 - **Soil Erosion:** Flash floods can remove the topsoil layer, causing significant erosion and degradation of land quality.
 - **Infrastructure Damage:** The force of rapidly flowing water can damage or destroy roads, bridges, buildings, and other infrastructure.
 - **Loss of Life and Property:** Flash floods can lead to casualties and loss of property due to their sudden onset and destructive nature.
- **Groundwater Recharge:** This typically occurs through slow and steady infiltration of water into the soil, which is more common in regular rainfall patterns. In flash floods, the rapid runoff prevents significant infiltration into the ground, thereby limiting the recharge of groundwater. Therefore, groundwater recharge is not a common impact of flash floods.

2. The correct answer is: B

Explanation:

- **Statement 1: Incorrect.** The Mi-17 helicopter is primarily used for military purposes, although it can also be used for civilian applications. It is widely employed by armed forces around the world, including the Indian Air Force, for troop transport, logistics support, and search and rescue operations.
- **Statement 2: Correct.** The Mi-17 helicopter is equipped with advanced avionics, which allows it to operate

effectively in various weather conditions. It has capabilities for night operations and can be used in diverse environments, ranging from deserts to mountainous regions.

- The Mi-17 series is known for its versatility, durability, and ability to perform a wide range of missions, making it a valuable asset for both military and civilian operations.

3. The correct answer is: A

Explanation:

- **Statement 1: Correct.** The Krishna Raja Sagar Dam is built across the Cauvery River in the state of Karnataka. It is located near Mysore and is a significant structure for water resource management in the region.
- **Statement 2: Correct.** The dam was designed by Sir M. Visvesvaraya, a renowned engineer and statesman. It was completed in 1931 and was one of the earliest large-scale projects in India, reflecting Visvesvaraya's engineering prowess.
- **Statement 3: Incorrect.** While the Krishna Raja Sagar Dam does contribute to hydroelectric power generation, its primary purposes are irrigation and providing water supply to the cities of Mysore and Bengaluru. The dam supports agriculture in the region by irrigating vast tracts of land.

4. The correct answer is: B

Explanation:

- **Statement 1: Incorrect.** The 32nd International Conference of Agricultural Economists was not held in India for the first time. The conference took place in India after a gap of 65 years, indicating



that it had been hosted in the country before.

- **Statement 2:** Correct. The theme of the 32nd ICAE was "Transformation Towards Sustainable Agri-Food Systems," focusing on addressing global challenges such as climate change and sustainable agriculture.
- **Statement 3:** Correct. During the conference, India's role in providing global solutions for food and nutrition security was emphasised, highlighting the country's advancements in agriculture and its potential to contribute to global food security.

5.The correct answer is: A

Explanation:

- **Statement 1:** Correct. India is one of the largest producers of cotton in the world, alongside countries like China and the United States. India has a significant share in global cotton production.
- **Statement 2:** Incorrect. Cotton is primarily grown in regions with moderate to low rainfall and requires a warm climate. It thrives in areas with well-distributed rainfall, and excess humidity can lead to pest problems. It is usually grown in regions that have a dry and sunny climate.

6.The correct answer is: C

Explanation:

- **Statement 1:** Correct. MSP is announced for both food crops (such as wheat and rice) and non-food crops (such as cotton and jute). The government provides MSP to ensure farmers have a minimum profit for the harvest if market prices fall below a threshold.
- **Statement 2:** Correct. The Commission for Agricultural Costs and Prices (CACP) is responsible for recommending MSP to the Government of India. The CACP considers factors such as the cost of production,

overall demand and supply, price trends in domestic and international markets, inter-crop price parity, and the likely implications of MSP on consumers, in formulating its recommendations.

7.The correct answer is: D

Explanation:

- **Statement 1:** Correct. The Western Ghats run parallel to the western coast of India, while the Eastern Ghats run parallel to the eastern coast.
- **Statement 2:** Correct. The Western Ghats have a higher average elevation compared to the Eastern Ghats and receive significantly more rainfall due to their location in the rain shadow region, which influences their climate.
- **Statement 3:** Correct. The Western Ghats are known for their high biodiversity and are designated as a UNESCO World Heritage site due to their ecological significance. The Eastern Ghats, while also rich in biodiversity, are less recognized globally for their biodiversity compared to the Western Ghats.

8.The correct answer is: A

Explanation:

- **Statement 1:** Correct. Eco-Sensitive Zones are indeed designated around protected areas such as wildlife sanctuaries and national parks to regulate human activities and reduce ecological impact.
- **Statement 2:** Correct. The Gadgil Committee originally recommended declaring the entire Western Ghats as ESZs, while the Kasturirangan Committee proposed a reduced area for these zones, accommodating the concerns of various stakeholders.
- **Statement 3:** Incorrect. ESZs impose specific restrictions on activities, including agricultural practices, to protect the ecological balance. The level of restrictions is not solely decided by local governments but involves a process of consultation and adherence to central guidelines.



9. The correct answer is: A

Explanation:

The Axiom-4 mission is a spaceflight mission organised by Axiom Space, a private company based in the United States. It is part of a series of commercial missions to the International Space Station (ISS) aiming to facilitate private astronaut missions and research in space.

10. The correct answer is: C

Explanation:

- **Correct:** ESZs are designated areas meant to protect and conserve sensitive

ecological regions from potentially damaging human activities.

- **Incorrect:** The establishment and management of ESZs involve both central and state governments, with central oversight ensuring a coordinated approach.
- **Correct:** Both the Gadgil Committee (2011) and the Kasturirangan Committee (2013) made recommendations for the designation and management of ESZs, specifically in the Western Ghats region.





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