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Primary market does not need special dispensation



Saluting Grassroots Governance: Panchayati Raj Day

The observance of National Panchayati Raj Day marks a landmark in India's democratic evolution, commemorating the implementation of the 73rd Constitutional Amendment Act, which granted constitutional status to Panchayati Raj Institutions (PRIs). This reform institutionalised decentralisation by empowering rural local bodies as units of self-government, enabling direct participation of citizens in decision-making. Originating from recommendations of the Balwant Rai Mehta Committee, the Panchayati Raj system strengthened grassroots democracy by transferring authority, responsibility, and resources to local levels. It ensured that governance became more responsive, participatory, and tailored to local needs, marking a decisive shift from centralised administration to inclusive governance.

(Continued on page 8)

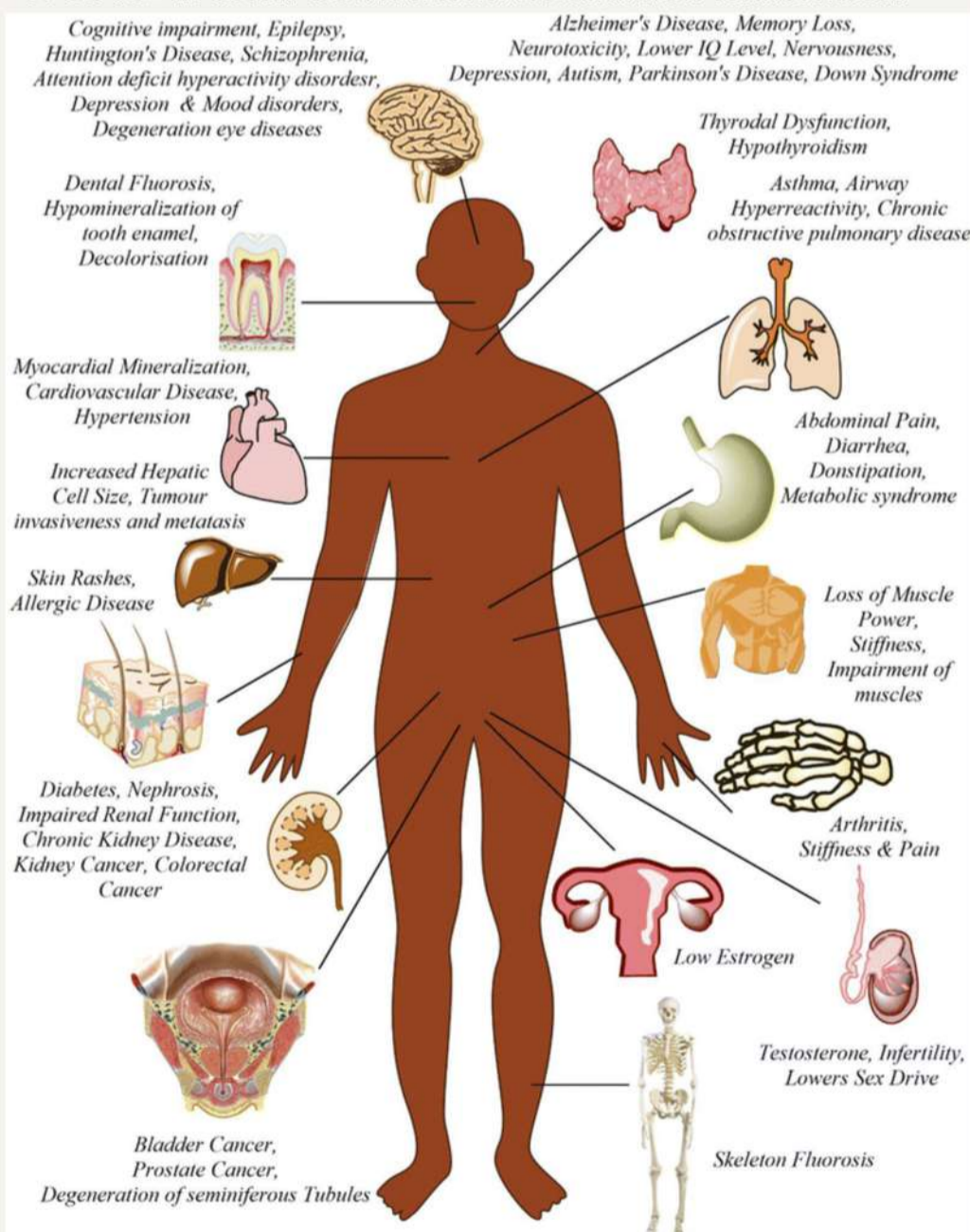


Mitigate arsenic & fluoride contamination in groundwater, NGT tells states

The National Green Tribunal (NGT) has directed all States and the Centre to take urgent steps to address **arsenic and fluoride contamination** in groundwater. Acting suo motu, the tribunal has asked all 28 States to submit detailed data on contamination across districts, blocks, and villages, while mandating the Central Ground Water Authority (CGWA) to monitor mitigation measures and ensure timely remedial action.

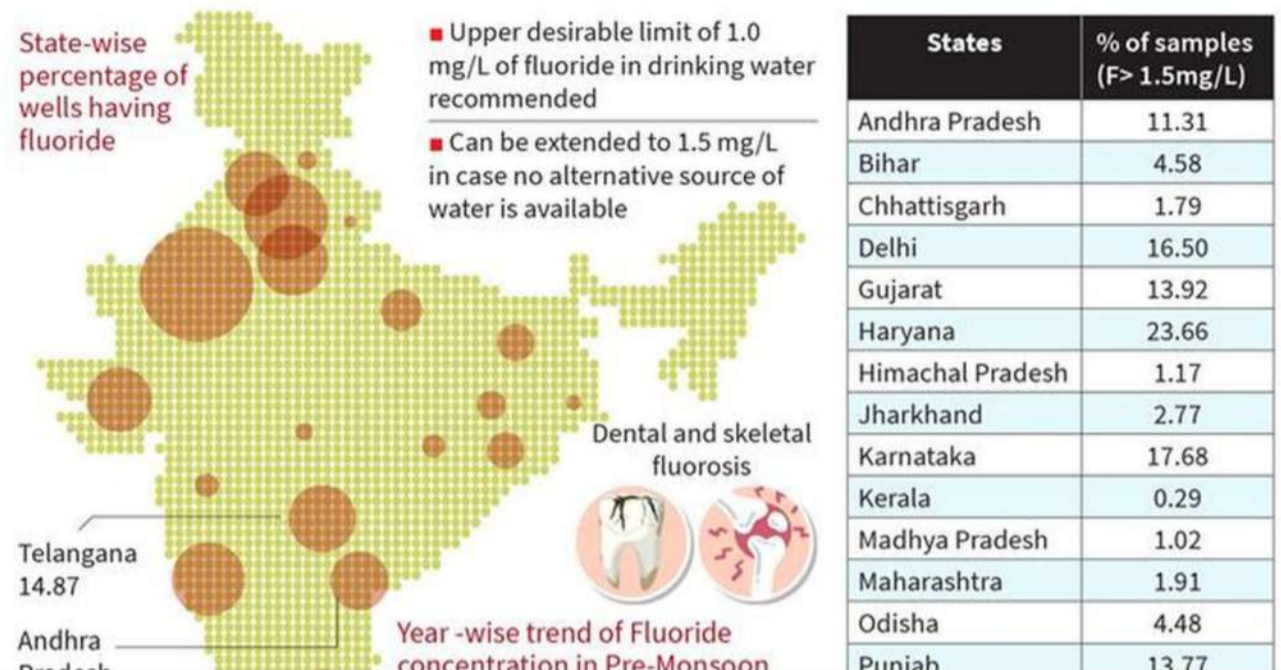
Health Risks and Nature of Contamination

Arsenic contamination poses serious health risks, including arsenicosis, skin lesions, pigmentation, and even cancer upon prolonged exposure. Fluoride contamination, on the other hand, leads to dental and skeletal disorders. The issue is particularly severe in eastern and south-eastern India for arsenic, and central, eastern, and parts of western and southern India for fluoride.



Fluorosis alert

The National Ground Water report released recently has put the spotlight on the surge in fluoride concentration in groundwater that is linked to overexploitation



Extent and Regional Spread

Data presented before the tribunal highlights the gravity of the situation. States like Bihar, West Bengal, and Uttar Pradesh show widespread contamination across thousands of wards and multiple districts. In addition, contamination has been reported in states such as Punjab, Rajasthan, Gujarat, Madhya Pradesh, Telangana, Andhra Pradesh, and Odisha, indicating a nationwide challenge.

Causes of Contamination

The contamination is attributed to both natural and anthropogenic factors. Natural causes include weathering of rocks and alluvial formations, especially in the Ganga-Brahmaputra basin, while human activities such as industrial discharge and excessive use of fertilisers and pesticides have aggravated the problem.

Mitigation Measures & Government Response

The CGWA has recommended solutions such as water filtration plants, reverse osmosis systems, and ion-exchange processes. States have initiated measures including installation of purification plants and expansion of piped water supply under schemes like the Jal Jeevan Mission. However, the NGT has emphasised the need for consistent monitoring, coordinated action, and long-term solutions to ensure safe drinking water access.

The NGT's intervention on arsenic and fluoride contamination in groundwater underscores that safe drinking water is a pressing environmental and public-health imperative. By compelling States and the Centre to systematically map polluted aquifers, install appropriate filtration technologies, and upgrade rural water supply, the tribunal is pushing the states toward a more rights-based, health-centric, and data-driven approach to water governance.

Scaling climate adaptation from policy to grassroots

India is among the most climate-vulnerable countries globally, having experienced over 430 extreme weather events between 1995 and 2024, causing massive economic and human losses. Recognising these risks, India's updated **Nationally Determined Contributions (NDCs)** for 2031–35 emphasise integrating climate adaptation into development planning, covering sectors such as coastal resilience, infrastructure, agriculture, and livelihoods. This aligns with global commitments like the COP30 focus on scaling adaptation efforts.



Policy Shift: Mainstreaming Climate Adaptation

India's approach is moving from fragmented interventions to a more integrated adaptation framework. The NDCs aim to institutionalise resilience across sectors, linking national commitments with local implementation through mechanisms such as State Action Plans on Climate Change (SAPCCs) and a proposed National Adaptation Plan.

Key Initiatives and Models

Programmes like ICAR's **National Innovations in Climate Resilient Agriculture** focus on climate-smart agriculture, covering hundreds of vulnerable districts through risk mapping and farmer capacity-building. Similarly, Tamil Nadu's Climate Resilient Villages (CRV) programme is recognised as a best practice for its holistic, community-driven approach, addressing water management, renewable energy, biodiversity, and livelihoods. These models demonstrate scalable pathways for building adaptive capacity.

Challenges

Despite progress, adaptation efforts remain scattered, making financing and implementation difficult. While adaptation spending is estimated at 5.6% of GDP, budgetary priorities remain skewed toward mitigation. Globally, the United Nations Environment Programme estimates a large adaptation financing gap, highlighting the need for stronger domestic resource mobilisation in India.

India's adaptation strategy must move beyond infrastructure to include livelihood diversification, skill development, and social resilience. A coordinated, multi-level governance framework combining national policy with grassroots action is essential.

Financing Adaptation: Need for Structural Reforms

India requires a clear framework to classify and prioritise adaptation investments. Current tools like the Climate Finance Taxonomy focus largely on mitigation, overlooking adaptation benefits such as avoided losses and socio-economic gains. Strengthening state-level adaptation funds, integrating climate budgeting, and tracking adaptation expenditure within government budgets are critical steps to ensure sustained financing.

Institutional Strengthening and Governance

Effective adaptation requires institutionalisation across all governance levels. This includes regular climate vulnerability assessments, improved data systems, capacity-building, and coordination across departments. Strengthening climate cells at State and district levels and ensuring periodic monitoring can enhance accountability and policy effectiveness.

Locally Led Adaptation (LLA)

A key emerging principle is Locally Led Adaptation, emphasised at global forums like COP30. This approach prioritises community participation in planning and implementation, ensuring that adaptation strategies are context-specific and inclusive. Empowering local bodies such as Panchayats and urban local institutions is essential for translating national goals into ground-level outcomes.

China's new Atlas drone swarm system

China's People's Liberation Army (PLA) has unveiled the "Atlas" drone swarm system, a highly advanced, mobile battlefield-like platform capable of launching and controlling up to 96 drones simultaneously. Mounted on vehicles, the system integrates launch, command, and support units, enabling a single operator to manage a large swarm for reconnaissance, communication disruption, and precision attacks. Its compact and mobile design allows deployment from remote and concealed locations, making it tactically flexible.

Key Technological Features

The Atlas system can simultaneously launch up to 96 small- and medium-sized speed drones that can form defensive structures and precision formations, both to defend and attack. This system stands out for its rapid launch capability (duration between consecutive drone launches is less than 3 seconds), coordinated swarm behaviour, and high level of autonomy. Unlike conventional systems that rely on numbers alone, Atlas emphasises "intelligentization"—where drones can independently identify targets, adapt in real time, and execute coordinated missions with minimal human intervention. This cognitive capability gives it a strategic edge over comparable systems. Amid the recent West Asia war, the US advanced E-3 Sentry AWACS aircraft at the Prince Sultan Airbase in Saudi Arabia was destroyed by a swarm of 29 drones and a few ballistic missiles.

The entire Atlas system consists of three units — a Swarm-2 ground combat vehicle, a command vehicle, and a support vehicle. A single Swarm-2 ground combat vehicle can carry and launch 48 fixed-wing drones, and a single command vehicle can simultaneously control up to 96 drones in a swarm. Its size and mobility make it extremely useful for reconnaissance, interception, and attack on high-value targets.

The Atlas drone swarm system exemplifies how emerging technologies, particularly artificial intelligence and swarm algorithms, are transforming modern warfare to a network-centric battlefield. Instead of relying on a few high-value, expensive platforms, systems like Atlas deploy scores of small, cheap, semi-autonomous drones that can coordinate among themselves to conduct reconnaissance, jam communications, and execute precision strikes.



Development and Testing

The system has been developed by China Electronics Technology Group Corporation (CETC), a major state-owned defence technology firm. It has undergone multiple tests, including public demonstrations in 2026, though its export potential remains uncertain due to its strategic significance.

Role in China's Military Doctrine

Atlas aligns with China's broader shift toward "intelligent warfare," as outlined in its military strategy and Five-Year Plans. The PLA increasingly integrates drones across operations, learning from recent global conflicts and expanding deployment across regions such as the Taiwan Strait and the Line of Actual Control (LAC).

Governance Framework: From Schemes to Delivery

For countries like India and Taiwan, such systems pose significant challenges. Drone swarms can overwhelm air defence systems, disrupt logistics, and target critical infrastructure. Their autonomous and adaptive nature also makes countermeasures like jamming more difficult. Overall, the Atlas system signals a shift toward faster, technology-driven warfare, where artificial intelligence and unmanned systems play a decisive role.

The Indian EXPRESS

Love, with a little help from the state

Japan's Kochi prefecture has turned romance into a line item in public budgets by offering a subsidy of up to 20,000 yen annually to singles aged 20–39 for using approved matchmaking services and dating applications. This policy is part of a broader effort to tackle Japan's dual crises of a rapidly ageing population, dwindling birth rates, and rising social isolation. The move reflects how demographic decline and loneliness are no longer treated as private or emotional issues alone, but as structural social problems that require active state intervention through innovative policy instruments.

Beyond the optics of "paying people to date", the subsidy tacitly acknowledges that precarious work-life balance, limited job opportunities, and the high cost of housing and childcare have made forming relationships and families increasingly difficult. In this context, even modest financial nudges can have symbolic value, signalling that the state has a role in fostering social connection and combating loneliness. The example also raises broader questions about the expanding reach of governance into domains like love and marriage.

Editorial to Exam - Most probable question from this editorial

The Japanese state's decision to subsidise dating and matchmaking reflects a shift from viewing romance as a private affair to treating it as a matter of public policy. Comment.



High Heat

India is experiencing an early and intense onset of summer, with temperatures crossing 40°C across central, southern, and coastal areas. The India Meteorological Department has issued heat alerts, attributing the conditions to factors such as **weak western disturbances, reduced convective activity, and residual effects of El Niño.** Rising temperatures, coupled with humidity and urban heat island effects, are increasing health risks, particularly cardiovascular stress, and delaying recovery due to warmer nights. Heatwaves are also affecting economic productivity, with significant work-hour losses and adverse impacts on agriculture, including faster crop maturity and potential food inflation.

Current responses through Heat Action Plans remain largely reactive, focusing on emergency measures rather than long-term structural solutions like urban greening, labour protection, and climate-resilient infrastructure. Vulnerable groups, especially informal workers and farmers, face heightened risks. Addressing the crisis requires sustained funding, improved public health outreach, and broader climate adaptation strategies, alongside global cooperation for mitigation and access to climate finance.

Editorial to Exam - Most probable question from this editorial

"Rising heatwaves in India highlight gaps in climate adaptation and urban planning." Examine the causes and impacts of increasing heat stress, and suggest measures to strengthen resilience and policy response.

thehindu**businessline.**

TUESDAY - MARCH 31, 2026

Misreading markets

A decline in stock prices in early 2026 has significantly reduced primary market fundraising, with average monthly IPO collections falling to ₹5,610 crore from ₹31,757 crore in late 2025. This slowdown reflects a natural correction after a period of excessive activity, during which IPO volumes and funds raised had surged well above historical averages. Increased participation of retail investors, partly due to regulatory curbs on derivatives trading, has raised concerns given the higher risks associated with IPO investments and the relatively weaker track records of issuing firms.

Despite this correction, the Securities and Exchange Board of India has relaxed IPO norms by extending deadlines and allowing reductions in issue size, aiming to support fundraising amid global uncertainties. However, concerns persist regarding the quality of issuances, especially following scams in the SME segment involving misuse of funds and price manipulation. The situation highlights the need for stricter disclosure norms, enhanced scrutiny, and measures to curb speculative activity, rather than regulatory easing, to ensure stability and investor protection in primary markets.

Editorial to Exam - Most probable question from this editorial

"Regulatory easing in financial markets during periods of slowdown may undermine market integrity." Critically examine this statement in the context of recent developments in India's IPO market.

Transferring equity to coastal communities

India's conservation and biodiversity governance has historically remained land-focused, leaving its vast marine domain under-regulated. Despite legal provisions, the absence of an operational framework for marine biodiversity has created a gap in economic sovereignty, especially as the global bio-economy increasingly shifts toward ocean-based resources.

Concept of Access and Benefit Sharing (ABS)

The principle of Access and Benefit Sharing (ABS), embedded in the Biological Diversity Act, 2002 and strengthened by the Biological Diversity (Amendment) Act, 2023, ensures that profits derived from biological resources are equitably shared with local communities. Successful implementation of the same in land-based sectors, such as **Red Sanders in Andhra Pradesh**, demonstrates how funds can be channelled to grassroots institutions like Biodiversity Management Committees (BMCs), ensuring community participation and conservation incentives.

India's Extraction-Only Marine Economy

Traditionally, India's marine sector has largely followed an extraction-driven model, where large-scale fishing and exports generate revenue without benefiting traditional fishing communities. Unlike forest dwellers, coastal fishers receive no share from the high-value genetic resources of marine species, highlighting a structural inequity in the current system.

Policy Shift: Extending ABS to Marine Sector

The 2023 Biological Diversity amendment Act recognises **oceans as strategic national assets** and seeks to operationalise ABS in the marine domain. This aligns India with global frameworks such as the **BBNJ Agreement** and international benefit-sharing norms like the **Cali Fund**. By doing so, India aims to ensure compliance with emerging global sustainability standards, particularly in markets like the EU and the U.S.

India's move to operationalise marine ABS represents a shift from an extractive to an equitable Blue Economy model. By integrating conservation with economic benefits and aligning with global standards, the framework aims to protect marine genetic resources while ensuring that coastal communities become direct stakeholders in the country's maritime growth.



Emerging Dimension: Digital Sequence Information (DSI)

A key shift in the bio-economy is toward Digital Sequence Information (DSI)—genetic data derived from marine organisms used in pharmaceuticals, biotechnology, and industrial applications. The new framework ensures that even when biological resources are digitally utilised (e.g., for patents), benefits are shared with local communities, preventing bypass of traditional stakeholders.

Economic Potential: Marine ABS and Revenue Generation

India's seafood exports, valued at over ₹62,000 crore, present significant potential for ABS-based revenue. By targeting large industrial processors and high-value wild catch, even partial implementation (e.g., 10%) could generate substantial funds for coastal development, infrastructure, and livelihood security, particularly in leading States like Andhra Pradesh.

Economic Potential: Marine ABS and Revenue Generation

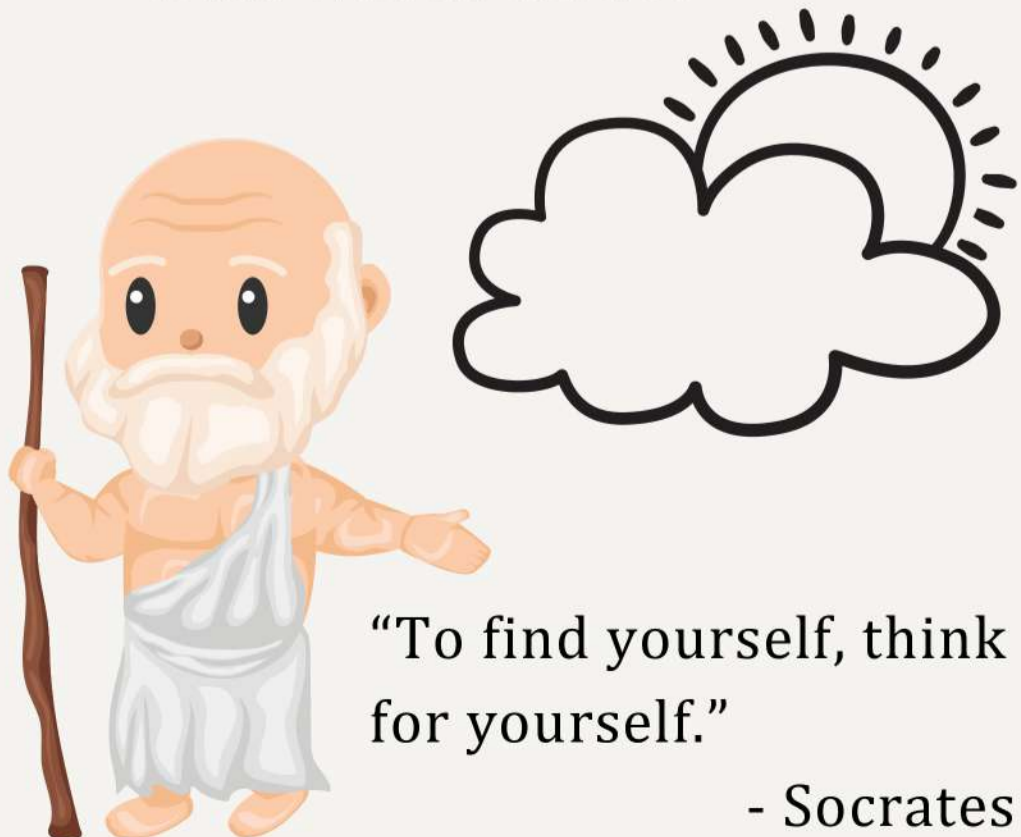
Agencies such as the National Biodiversity Authority and State Biodiversity Boards are central to implementation. Initiatives like Kerala's marine ABS consultations and proposals to integrate systems with Marine Products Export Development Authority and customs platforms aim to create a seamless, technology-driven compliance mechanism. The framework ensures that small-scale and traditional fishers are exempt from ABS levies, with the financial burden placed on large exporters and industrial players.

CSIP SCHOLARSHIP GUIDE

This is your chance to turn preparation into opportunity—attempt these questions seriously and prepare for exciting scholarships that can support your civil service journey.

7 Days to go - 7 model questions

1. The “Attorney General of India” is appointed under which Article?
2. The “Asian Development Bank” is headquartered in which city?
3. The “NITI Aayog” replaced which earlier body?
4. The “Bhimbetka Caves” are located in which state?
5. The “Ilbert Bill controversy” is associated with which Viceroy?
6. The “Fiscal Responsibility and Budget Management Act” was enacted in which year?
7. The “Basel Convention” deals with which issue?



Answers to the Previous Day's Questions

1. Article 280
2. IMF/World Bank
3. Present Uttarakhand (previously part of Uttar Pradesh)
4. Sir Thomas Munro
5. Monetary Policy Committee (MPC)
6. Ganga-Brahmaputra
7. Climate Change - it focuses on reducing Greenhouse Gases)
8. 2017

PRELIMS CORNER :

1) Consider the following statements:

Statement I: Studies indicate that carbon dioxide emissions from cement industry account for more than 5% of global carbon emissions.

Statement II: Silica-bearing clay is mixed with limestone while manufacturing cement.

Statement III : Limestone is converted into lime during clinker production for cement manufacturing.

Which one of the following is correct in respect of the above statements?

(a) Both Statement II and Statement III are correct and both of them explain Statement I

(b) Both Statement II and Statement III are correct but only one of them explains Statement I

(c) Only one of the Statements II and III is correct and that explains Statement I

(d) Neither Statement II nor Statement III is correct

2) Which one of the following launched the 'Nature Solutions Finance Hub for Asia and the Pacific'?

(a) The Asian Development Bank (ADB)

(b) The Asian Infrastructure Investment Bank (AIIB)

(c) The New Development Bank (NDB)

(d) The International Bank for Reconstruction and Development (IBRD)



Panchayati Raj: Deepening Democracy and Empowering Rural India



(Continued from page 1)

A key significance of PRIs lies in their role in social and political empowerment, particularly of women and marginalised communities. The 73rd Amendment mandated reservation of not less than one-third of seats and leadership positions for women under Article 243D, a historic step toward gender inclusion in governance. This has enabled large-scale entry of women into political processes, improving awareness, representation, and participation at the grassroots. Despite challenges such as patriarchal control, proxy representation, and lack of administrative experience, PRIs have initiated a gradual transformation in rural power structures. With supportive measures like training, self-help groups, and institutional incentives, Panchayati Raj Institutions continue to serve as a critical instrument for deepening democracy, reducing inequalities, and fostering inclusive rural development in India.

Prelims Corner: Explanations

1) Answer is option b

Statement I: Studies indicate that carbon dioxide emissions from cement industry account for more than 5% of global carbon emissions.

This is correct because the cement industry contributes more than 5% of global carbon dioxide emissions, with recent estimates placing it around 7–8%.

Statement II: Silica-bearing clay is mixed with limestone while manufacturing cement.

This is correct, as cement is manufactured by mixing limestone with silica-bearing clay or similar materials to obtain the necessary chemical composition for clinker formation.

Statement III : Limestone is converted into lime during clinker production for cement manufacturing.

This is correct, since during clinker production, limestone (calcium carbonate) is heated and converted into lime (calcium oxide), releasing carbon dioxide in the process; this reaction, known as calcination, is a major source of emissions in cement manufacturing.

However, only Statement III directly explains the high level of carbon dioxide emissions mentioned in Statement I, because it involves the actual release of CO₂ during the chemical process, whereas Statement II merely describes the raw materials used. Therefore, the correct answer is (b).

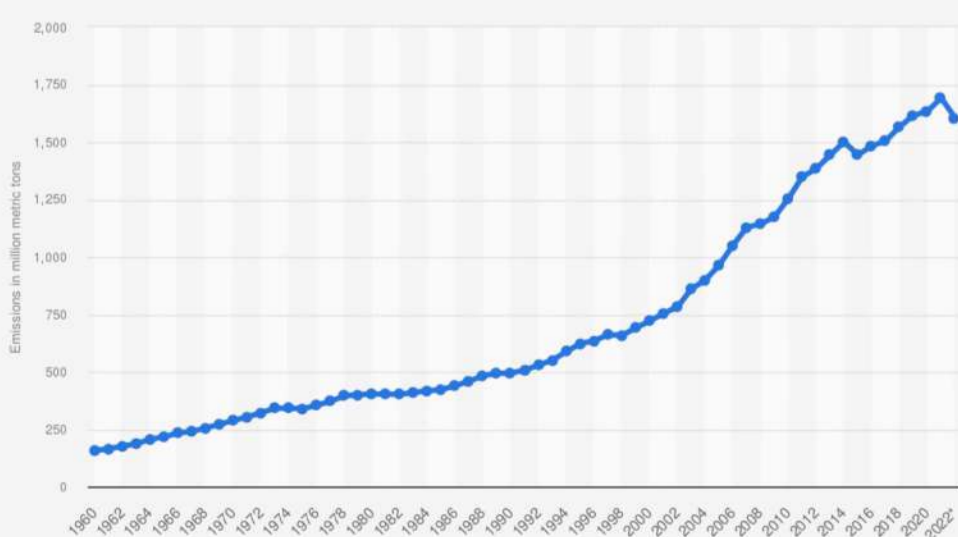
2) Answer is option a

Asian Development Bank (ADB).

The Nature Solutions Finance Hub for Asia and the Pacific was launched by the ADB at COP28 as part of its broader role as the “Climate Bank” for the region. The platform aims to mobilize at least \$5 billion in public and private finance to scale up investments in nature-based solutions such as biodiversity conservation and climate resilience projects. It focuses on creating bankable and scalable projects while using innovative financing methods to attract private capital. The involvement of multiple financial and technical partners further reinforces that this is a large, coordinated development initiative typically led by a regional multilateral institution like the ADB. Hence, based on both the factual information and the nature of the initiative, option (a) is correct.

The Asian Development Bank (ADB) is a leading multilateral development bank established in 1966 to promote economic growth and cooperation in the region. Headquartered in Manila, Philippines, it was created to support one of the then poorest regions of the world, initially focusing on agriculture and rural development. Over time, its role has expanded significantly, and today ADB works with 69 member countries to support sustainable, inclusive, and resilient development across Asia and the Pacific. It provides financial assistance, policy advice, and technical expertise for projects in infrastructure, climate action, and social development. Through its long-term vision outlined in Strategy 2030, ADB aims to build a prosperous, inclusive, resilient, and sustainable region while continuing efforts to eliminate extreme poverty, which explains its leadership in initiatives like the Nature Solutions Finance Hub.

Carbon dioxide emissions from the manufacture of cement worldwide from 1960 to 2022 (in million metric tons)



Sources: Global Carbon Project; Expert(s) (Friedlingstein et al. (2023), Andrew and Peters (2023)).
 Additional Information: Worldwide; Global Carbon Project; Expert(s) (Friedlingstein et al. (2023), Andrew and Peters (2023)); 1960 to 2022
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