

Daily Current Affairs To The Point by Dhananjay Gautam

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GS Paper 2 – Governance, Constitution, and Polity

President Highlights the Role of Mediation in Reducing Judicial Burden

Context: At the **first National Mediation Conference** organized by the **Mediation Association of India (MIA)**, the **President of India** strongly emphasized the growing importance of **mediation** as a tool to resolve disputes, reduce litigation costs, and ease the **overburdened court system**.

What is Mediation?

Mediation is a **voluntary, confidential, and non-adversarial** process where a **neutral third party** (mediator) assists disputing individuals or parties in arriving at a **mutually acceptable solution**.

It is one of the key pillars of Alternative Dispute Resolution (ADR), alongside:

- Arbitration
- Conciliation
- Negotiation

India's Judicial Backlog: A Crisis in Numbers

The Indian judiciary is currently struggling under a **mountain of pending cases**:

- 5.1 crore+ total pending cases (as of 2024)
 - **71,000** in the **Supreme Court**
 - **60 lakh** in **High Courts**
 - **4.5 crore** in **District and Subordinate Courts**
- Judge Vacancy: Out of ~25,000 sanctioned judges, only ~20,000 are in place (~20% shortfall)
- Judge-to-population ratio: Only 21 judges per million, far short of the Law Commission's recommendation of 50 per million

Why Mediation Matters:

Mediation offers a practical, humane, and sustainable approach to dispute resolution:

- Reduces Court Pendency: Ideal for minor civil, commercial, and family disputes
- Time-Efficient: Resolutions are often reached within a few sessions
- Cost-Effective: Cuts down on legal fees and court expenses
- Relationship-Friendly: Preserves personal and business ties
- Empowering: Parties retain control over the outcome, rather than having a solution imposed

Legal and Institutional Support:

Mediation in India is supported by several key **laws and frameworks**:

- Legal Services Authorities Act, 1987: Created Lok Adalats using mediation-like techniques
- Section 89, Civil Procedure Code (1908): Courts mandated to refer cases for ADR
- Mediation Act, 2023 (Landmark legislation)
 - Mandatory pre-litigation mediation in civil & commercial matters
 - Formation of the **Mediation Council of India (MCI)** for:





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- Standardizing training & accreditation
- Regulating mediation institutions
- Monitoring mediator conduct and case outcomes

Mediation in Current Legal & Commercial Disputes:

- Commercial Courts Act, 2015: Fast-tracks commercial cases above 23 lakh and promotes prelitigation mediation
- Arbitration and Conciliation Act, 1996 (with 2015, 2019, 2021 amendments): Encourages binding arbitration, both ad hoc and institutional
- Consumer Protection Act, 2019: Emphasizes mediation as a primary dispute resolution tool
- Singapore Convention on Mediation: India's participation paves the way for cross-border enforcement of mediated settlements

The Way Forward:

To make mediation a **mainstream judicial tool**, India must:

- 1. Strengthen Legal Infrastructure: Ensure uniform and effective implementation of the Mediation Act, 2023
- 2. Boost Awareness: Launch nationwide mediation literacy campaigns
- 3. Train Mediators: Scale up capacity building with standardized certification
- 4. Judicial Backing: Encourage active referrals by judges to mediation centers
- 5. Go Digital: Promote Online Dispute Resolution (ODR) for convenience and speed
- 6. **Track Progress**: Build **national databases** to assess mediation outcomes and their impact on court backlog

Conclusion:

The President's address underscores a **pivotal shift** in India's legal landscape. **Mediation is not merely an alternative**—it is an **essential path** to **accessible, timely**, and **empathetic justice**. As India advances, a **robust mediation ecosystem** can transform how we resolve conflicts, preserve relationships, and uphold the rule of law.

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GS Paper 3 – Science & Technology

Genome-Edited Rice Varieties: India's Leap Toward a Second Green Revolution

Context: In a landmark announcement, the **Union Agriculture Minister** introduced **two genome-edited rice varieties**, signaling a **new era in agricultural innovation** that could ignite the **Second Green Revolution** in India.



What is Genome Editing?

Genome editing is a cutting-edge biotechnological method that enables **precise alterations in the DNA** of living organisms. The most notable tool in this domain is:

- **CRISPR-Cas9** (*Clustered Regularly Interspaced Short Palindromic Repeats associated protein* 9):
 - Acts like **molecular scissors** to remove, insert, or modify genetic material with pinpoint accuracy.
 - Unlike **Genetically Modified Organisms (GMOs)**, it doesn't require **foreign DNA** insertion, making it more **biologically natural and acceptable** under Indian biosafety regulations.

In India, **SDN-1** and **SDN-2** techniques (which do not introduce foreign genes) are permitted for general crops.

India's First Genome-Edited Rice Varieties:

Developed by ICAR (Indian Council of Agricultural Research), the two new varieties are:

- DRR Rice 100 (Kamla)
- Pusa D<mark>ST Rice</mark> 1

These are outcomes of CRISPR-based research that began in 2018 under the **National Agricultural Science Fund**, targeting **Samba Mahsuri** and **MTU 1010** rice lines.

| Impact Area | Benefit | |
|---------------------------|--|--|
| Yield | 19% increase | |
| Water Use | Saves 7,500 million cubic meters of irrigation water | |
| Greenhouse Gas Emissions | 20% reduction , especially in methane | |
| Climate Resilience | Tolerant to drought, salinity, and heat | |
| Pest & Disease Resistance | Less dependence on chemical pesticides & fertilizers | |

Benefits of Genome-Edited Rice:

Understanding CRISPR Technology:

- Inspired by **natural bacterial immunity**, CRISPR identifies and destroys **invading viral DNA**.
- In agriculture, it helps in:
 - Developing disease-resistant crops

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- Improving **nutritional quality**
- Enhancing climate adaptability

Path to a Second Green Revolution:

| First Green Revolution | Second Green Revolution (Genome-Editing) | |
|---|---|--|
| High-yielding wheat & rice varieties | Precision-edited, climate-resilient crops | |
| Water-intensive, heavy chemical usage | Efficient resource use, lower environmental footprint | |
| Increased productivity, but ecological stress | Sustainable yield with minimal ecological harm | |
| Focused on food security | Focused on food security + climate adaptation + sustainability | |

Challenges & Concerns:

- Global Regulatory Uncertainty: Not all countries accept genome-edited crops, limiting exports.
- Corporate Monopolies: Risk of private control over patented technologies and seeds, raising costs for farmers.
- **Biodiversity Risk**: Over-reliance on select varieties could threaten **agro-genetic diversity**.

Way Forward:

- 1. Boost **R&D Investment**: 500 crore allocated in the **2023–24 Union Budget** for crop genome editing.
- 2. Expand Public Sector Role: ICAR is now extending genome-editing research to oilseeds, pulses, and horticultural crops.
- 3. Public-Private Partnerships: Encourage joint ventures for responsible innovation.
- 4. **Farmer & Scientist Training**: Build national capacity for **safe, inclusive use** of genome-editing tools.
- 5. Streamlined Regulation: Ensure transparent, science-based policies to balance safety and innovation.

Conclusion:

Genome-editing marks a **revolutionary stride** in India's agricultural transformation. With a focus on **higher yields, sustainability, and climate resilience**, these innovations can propel India into a **future of food security, farmer welfare**, and **eco-friendly farming**—without repeating the ecological mistakes of the past.

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GS Paper 3 – Environment, Agriculture

Agriphotovoltaics: Powering Farms with the Sun

Context: On **World Solar Day (May 3rd)**, attention turned to the transformative role of **solar energy in agriculture**, with **Agriphotovoltaics (APVs)** emerging as a powerful innovation to address **climate**, **food**, **and energy security**.



What are Agriphotovoltaics (APVs)?

Agriphotovoltaics refers to the **simultaneous use of land** for **solar energy production and agriculture** by **elevating solar panels** over crop fields. This integrated model:

- Increases land-use efficiency
- Creates microclimates for better crop resilience
- Enables dual income streams for farmers

Origin: Concept first introduced by German scientists Adolf Goetzberger and Armin Zastrow in 1981.

India's Solar Growth Milestones:

- 3450% growth in solar capacity in a decade
- 100.33 GW achieved as of January 2025
- 2024 solar boom:
 - **24.5 GW** added (2x increase from 2023)
 - **18.5 GW utility-scale** installations

Benefits of APVs for Farmers:

| Benefit Area | Details | |
|--------------------|---|--|
| Water Efficiency | Solar panels reduce evaporation by creating shade | |
| Climate Resilience | Shields crops from heat and erratic weather | |
| Stable Incomes | Lease land to solar companies or sell electricity via feed-in tariffs | |
| Crop Growth | Suitable for shade-tolerant crops (e.g., potatoes, tomatoes, turmeric) | |
| Income Potential | 1.5 lakh/acre vs 25,000 from traditional farming in Delhi pilot | |

APV in Action: India's Pilot Success:

- Najafgarh, Delhi Project:
 - Farmer leases land for 1 lakh/acre/year
 - Dual income from **crop + solar lease** or **solar power sales**

Scaling Up APVs: Policy and Support Needed:

- 1. Revamp PM-KUSUM Scheme:
 - o Integrate APV models into existing solarisation programs
 - Promote grid-connected dual-use solar plants

2. Financial Incentives:

Ocredit support & subsidies for **smallholder farmers** (<2 ha)









• Increase **feed-in tariffs** for APV-generated solar power

3. Farmer Training:

- Government-led programs on APV installation & management
- Encourage community-level solar farming cooperatives
- 4. Research & Customization:
 - Expand **pilot programs** across **different agro-climatic zones**
 - Develop **crop-specific APV designs**

Challenges:

| Challenge | Description |
|--------------------|--|
| Pilot-Scale Only | Currently limited to research and demonstration projects |
| High Initial Costs | Need for affordable financing and better risk coverage |
| Policy Gaps | No dedicated agrivoltaics policy in India |
| Lack of Awareness | Farmers and institutions unfamiliar with APV benefits |

Future Outlook:

- Align APVs with India's Net Zero and Doubling Farmers' Income goals
- Integrate APVs into national agricultural and climate strategies
- Promote **public-private partnerships (PPPs)** to expand infrastructure
- Launch awareness campaigns to popularize APV potential

Conclusion: Agriphotovoltaics offer a **win-win model** for India: **Higher farmer incomes**, **climate-adaptive agriculture**, and **renewable energy expansion**—all from the same piece of land.

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GS Paper 3 – Environment and Ecology

New Rules for Access and Benefit Sharing (ABS) of Biodiversity – 2025

Context: The National Biodiversity Authority (NBA) has notified the 2025 ABS Regulation to streamline fair and equitable sharing of benefits from the use of India's biological resources and associated traditional knowledge.

Aligned with India's commitments under the Convention on Biological Diversity (CBD) and the Biological Diversity Act, 2002 (amended in 2023).

What is Access and Benefit Sharing (ABS)?

ABS is a global framework to:

- Regulate access to biological resources (plants, animals, microbes, etc.)
- Ensure **benefits are shared fairly** with local and indigenous communities who conserve and hold traditional knowledge.

Key Provisions of the 2025 Regulation:

Turnover-Based Benefit Sharing (for commercial users):

| Annual Turnover | Benefit-Sharing Rate | |
|-----------------------------|------------------------------------|---------|
| Below 5 cro <mark>re</mark> | Exempt | |
| 5-50 crore | 0.2% of ex-factory annual turnover | 11000 |
| 50–250 cro <mark>re</mark> | 0.4% of turnover | m IPCI |
| Above 250 crore | 0.6% of turnover | 1101 30 |

Entities with >1 crore turnover must file annual usage statements.

Inclusion of Digital Sequence Information (DSI):

- DSI now recognized under ABS—includes genetic codes and digital data of biological resources.
- Aligns with global consensus from CBD COP16 (Cali, Colombia).

Exemptions:

Cultivated medicinal plants exempted—if officially notified by Ministry of Environment in consultation with AYUSH Ministry.

High-Value & Threatened Resources:

- Red sanders, sandalwood, agarwood, etc.:
 - **Minimum 5%** of sale/auction proceeds to be shared. 0
 - Can rise to **20%** in case of **commercial exploitation**. 0

Intellectual Property Rights (IPR):

- Mandatory disclosure of biodiversity use in patent/IP applications.
- **Benefit-sharing triggered upon commercialization** of inventions using biological resources.

Distribution of Shared Benefits:











- **10–15% retained** by **NBA** for administration.
- Remainder flows to local communities via Biodiversity Management Committees (BMCs).

Significance of the New Rules:

| Benefit Area | Explanation |
|----------------------|--|
| Transparency | Clear, predictable benefit-sharing slabs for industries |
| Regulatory clarity | DSI inclusion plugs a critical legal loophole in earlier ABS frameworks |
| Promotes cultivation | Incentivizes farming medicinal plants over unsustainable wild harvesting |
| Community benefit | Ensures economic returns reach indigenous/local biodiversity custodians |

Way Forward:

- Monitor implementation through **BMCs** and **State Biodiversity Boards**.
- Promote **capacity-building** for communities to assert benefit claims.
- Encourage **research and innovation** while upholding equitable sharing norms.

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TOGETHER WE SCALE HEIGHTS



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GS Paper 1 – Geography

Angola: A Nation of Strategic Importance and Growing Defense Ties with India

Geopolitical Overview of Angola:

- Capital: Luanda
- Location: Southwestern Africa
- Neighboring Countries:
 - **Republic of the Congo** (North)
 - Democratic Republic of the Congo (Northeast)
 - Zambia (Southeast)
 - Namibia (South)
- Maritime Boundary: Atlantic Ocean (West)

Geographical Features & Natural Resources:

Angola is endowed with **rich natural resources**, which are pivotal to its economy:

- Petroleum, diamonds, iron ore, phosphates, copper, feldspar, gold, bauxite, and uranium.
- Major rivers include the Zambezi, Cuango (Kwango), and Cuanza (Kwanza) rivers. The Cuango
 River forms part of the boundary between Angola and the Democratic Republic of the Congo.

Climate:

• **Tropical Climate** with a marked dry season. The climate is influenced by the **cold Benguela Current**, which flows northwards along the **southern African coast**, bringing cooler air and affecting precipitation patterns.

Angola-India Defense Relations:

• Recently, **India** announced a **\$200 million defense credit line** to Angola, marking a significant step in strengthening defense and strategic ties between the two nations.

Extra Insight: Angola's Strategic Position in Africa

Angola, with its strategic location in **southern Africa**, plays a critical role in the region's **geopolitics**. As one of Africa's largest oil producers, Angola has become a vital partner for energy, trade, and defense relations, especially with countries like **India**, **China**, and **Russia**. The increasing **defense collaboration** highlights Angola's growing importance as a security partner in the **African continent**.









6







Satavahans

SATAVAHANAS

GS Paper 1 – Ancient Indian History

The Satavahana Dynasty: A Glimpse into Ancient Deccan Culture and Politics

Context: Recently, the **Archaeological Survey of India (ASI)** uncovered **11 ancient inscriptions** in **Peddapalli**, **Telangana**, which are attributed to the **Satavahana dynasty**. These inscriptions, dating from the **1st BCE to the 6th CE**, are written in **Brahmi script** and **Prakrit language**, offering valuable insights into the political, cultural, and religious practices of the era. These findings also confirm **Telangana's historical ties** to **Asmaka**, one of the **sixteen Mahājanapadas** (ancient Indian republics).

The Satavahana Dynasty: Key Facts

- Time Period: 1st Century BCE to the Early 3rd Century CE
- Location: Initially centered around North Maharashtra and later expanding to Karnataka and Andhra Pradesh.
- **Significance**: The Satavahanas succeeded the **Maurya Empire** in the **Deccan** and **Central India**. Though mentioned as **Andhras** in the Puranas, the Satavahanas themselves did not use this term in their inscriptions.

Notable Rulers and Their Achievements:

Simuka (60 BCE - 37 BCE):

• Founder of the **Satavahana dynasty** and recognized as the first ruler in the **Naneghat inscription**.

Gautamiputra Satakarni (AD 106 - 130):

- Regarded as the greatest ruler of the **Satavahanas**.
- Defeated the Shakas and obliterated the Kshaharata dynasty.
- Expanded the empire from Malwa to Karnataka.
- Re-struck coins of defeated Kshaharata ruler Nahapana, symbolizing conquest.

Vashishthiputra Pulumayi (AD 130 - 154):

- Shifted the capital to **Paithan** (modern-day **Pratishthan**) on the Godavari River.
- Fostered alliances, including a marriage to **Rudradaman's** daughter to stop conflicts with the **Western Kshatrapas**.

Yajna Sri Satakarni (AD 165 - 194):

- Regained lost territories and promoted **maritime trade**.
- His coins depicted **ships**, highlighting the peak of his **maritime activity**.

Cultural and Technological Contributions:

- Material Culture: The Satavahanas are known for their iron tools such as hoes, ploughshares, and arrowheads, which contributed to agricultural advancements, particularly paddy transplantation in the Krishna-Godavari delta.
- **Trade**: Urbanization in cities like **Peddabankur** (200 BCE 200 CE) saw the construction of **brick structures**, **underground drainage**, and **wells**, reflecting the increasing complexity of the region's infrastructure and trade. Roman and Satavahana coins were found in the region, signifying strong **trade relations**.







Social and Religious Life:

- Social Structure: Initially a tribal kingdom, the Satavahanas became Brahmanized, re-establishing the varna system. Their society exhibited a matrilineal influence, with kings often named after their mothers.
- Religious Practices: The Satavahana rulers were staunch Brahmanas, patronizing Vedic rituals and worshiping gods like Krishna and Vasudeva. However, they were also strong patrons of Buddhism, with land grants made to Buddhist monks in places like Nagarjunakonda and Amaravati.

Art and Architecture:

- The **Satavahanas** are noted for their **rock-cut architecture**, including significant **Chaityas** and **Viharas** like the **Karle Chaitya** and **Nasik Viharas**.
- They supported the **Amaravati School of Art**, famous for its detailed and **narrative sculptures** of the **Buddha's life**.
- **Inscriptions** from **Naneghat** and **Karle** highlight their deep religious patronage, especially towards **Buddhism**.

Language and Literature:

- The official language of the Satavahanas was Prakrit, and their inscriptions were written in the Brahmi script.
- The Gathasattasai, a Prakrit text attributed to King Hala, contains 700 verses and is one of the most notable literary works of the time.

Decline and Legacy:

- The Satavahana dynasty started to decline around the **3rd century CE**. They were succeeded by the **Ikshvakus** in the **Eastern Deccan**, who continued many of the Satavahana traditions, especially in their patronage of **Buddhism**.
- Following the decline, the **Pallavas** emerged as prominent rulers in the **southern Deccan**.

Conclusion:

The discovery of these **Satavahana inscriptions** in **Telangana** provides a deeper understanding of the dynasty's **political, religious, and cultural impact**. Known for their **military prowess, support for Buddhism**, and **contributions to trade and urbanization**, the **Satavahanas** played a pivotal role in shaping the early history of the **Deccan** region. Their legacy lives on in the **Ikshvakus**, who carried forward the dynasty's cultural and administrative practices, particularly in Buddhist patronage.

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