

Current Issue

Aravalli Issue

Question 01

"Conservation of the Aravallis is not merely an environmental issue but a governance challenge." Comment on the statement with reference to inter-state coordination, urban expansion, and economic pressures.

Question Understanding - Finding Information

- **Precise Syllabus Mapping:** Environmental Conservation. (GS Paper – III)
- **Marks and words limit:**
 - The marks-oriented approach to answering **(10-mark, 150-word)** questions in the question is to use **Bullet Points** (one idea per bullet point), **Brainstorming**, or a combination of both.
 - The way to score good marks in questions worth **(15 marks. 250 words)** is to use the **Heading** and **Subheading** method while writing your answers.
- **Directive words:**
 - Comment → explain the statement, agree with it using arguments, and show why governance is central, not just ecology.
- **Focal points of the questions:**
 - Inter-state coordination
 - Urban expansion
 - Economic pressures

Answer Writing Structure (Outline)

Introduction Paragraph

- Start with ecological importance
- Pivot quickly to governance angle

Body Paragraph

A. Inter-State Coordination: Fragmented Governance

Issue:

- Aravallis extend across Rajasthan, Haryana, Delhi, Gujarat
- Different states follow: Varying land-use laws, Uneven mining regulations, Inconsistent forest classification

Impact:

- Regulatory arbitrage
- Lack of landscape-level conservation
- Weak cumulative impact assessment

B. Urban Expansion: Failure of Planning Institutions

Governance Dimensions:

- NCR-driven urban sprawl into Aravalli zones
- Dilution of: Zoning norms, Environmental Impact Assessment, Regularisation of illegal constructions

Environmental Outcome:

- Loss of green cover
- Heat-island effect
- Groundwater depletion

C. Economic Pressures: Regulation vs Development

Sources of Pressure:

- Mining (legal & illegal)
- Real estate expansion
- Infrastructure projects

Governance Weaknesses:

- Political-economic nexus
- Weak enforcement by regulatory bodies
- Low penalties and delayed action

D. Why Aravalli Conservation Is a Governance Challenge

Environmental Impact	Governance Failure
Desertification	Lack of inter-state coordination
Biodiversity loss	Policy dilution
Water stress	Poor urban planning
Air pollution	Unregulated mining

Way Forward (Governance-Centric)

- Establish an Inter-State Aravalli Conservation Authority
- Harmonise land-use and mining regulations
- Integrate Aravallis into regional & urban master plans
- Use GIS, satellite monitoring for enforcement
- Promote sustainable livelihoods to reduce economic pressure

Conclusion (max. 40 Words)

- Reiterate the central ideas from the body in a concise manner.

Dos & Don'ts
• Do for Maximum Marks

- ✓ Use terms like Directly address all three dimensions mentioned
- ✓ Maintain a balanced, analytical tone
- ✓ Link environment with institutions and policy
- ✓ Use tables/flowcharts if time permits
- ✓ End with a governance-oriented solution

- **Don't do these Common Mistakes**

- × Don't treat it as a purely environmental essay
- × Don't ignore economic drivers
- × Don't over-legalise (court judgments overload)
- × Don't be emotional or activist in tone
- × Don't skip a clear conclusion

Notes Oriented Content for Writing Answer

The Aravalli Range, stretching 692 km across four states, serves as the primary ecological shield of North India, acting as a natural buffer against desertification and a critical aquifer recharge zone. However, its conservation has transcended environmental bounds to become a multidimensional governance challenge. This is due to the inherent tension between state-level economic priorities (mining and real estate), the unplanned sprawl of the National Capital Region (NCR), and a federal vacuum in scientific mapping. The recent judicial debate over the "100-metre definition" underscores that without a unified statutory framework that overrides fragmented state interests, the range risks being reduced from a life-sustaining ecosystem to a mere administrative technicality.

Inter-State Coordination Challenges

The Aravallis are a single ecological unit, but they fall under the jurisdiction of multiple states and the central government, creating a "tragedy of the commons" scenario.

- **Fragmented Legal Protection:** Differing state policies and laws (e.g., PLPA in Haryana, forest acts in Rajasthan) create loopholes, allowing illegal mining to move from one state to another.
- **Definition Ambiguity:** Until late 2025, there was no uniform definition of what constituted "Aravalli Hills," leading to inconsistent enforcement and legal battles over whether specific areas (like low-lying ridges) were protected.
- **The "100-Metre Rule" Controversy:** The Nov 2025 Supreme Court move to adopt a uniform, height-based definition (only hills >100m are protected) sparked concern that 90% of the range, including crucial low-lying recharge zones, would lose protection.

- **Need for Centralized Authority:** The lack of a single, powerful "Aravalli Management Authority" (similar to the Himalayan Authority) hampers cohesive ecological management.

Urban Expansion and Encroachment

The rapid, unregulated expansion of cities like Gurugram, Faridabad, and Delhi into the surrounding hills is a major governance failure.

- **Illegal Construction & Colonization:** Farmhouses, luxury housing, and industries have mushroomed, often on land classified as forest or protected areas.
- **Land Use Change:** The conversion of green areas into "non-forest" or "residential" land in master plans has degraded the range's ability to act as a buffer against pollution.
- **Water Insecurity:** Construction disrupts natural drainage, preventing rainwater from percolating into the ground, leading to chronic water shortages and urban floods.
- **Loss of Green Cover:** The destruction of scrub forests and ridges has exacerbated air pollution in the NCR, making the city more vulnerable to dust storms.

Economic Pressures and Extractive Activities

The Aravallis are viewed by policy makers as a source of revenue, often prioritizing short-term economic gain over long-term environmental sustainability.

- **Legal and Illegal Mining:** The demand for building materials (quartzite, stone, sand) drives massive extraction. Even after judicial bans, illegal mining continues due to weak enforcement and high demand from the construction sector.
- **Revenue vs. Conservation:** State governments often hesitate to completely ban mining, as it provides royalty, employment, and fuels the regional economy.
- **"Quarry First, Repair Later" Mentality:** The failure to enforce post-mining rehabilitation has left behind barren, broken landscapes that cannot be easily restored.
- **Undervaluation of Ecosystem Services:** The immense value of the Aravallis (groundwater recharge, air purification) is not accounted for in GDP calculations, while the revenue from mining is highly visible.

Governance Challenges

- **Judicial vs. Executive Action:** Conservation has historically been driven by court orders, with the executive branch often slow to implement them.
- **Policy Loopholes:** The recent controversy highlighted how technical reclassification (100-meter rule) can be used to justify commercial exploitation.
- **Need for Holistic Management:** The future of the Aravallis depends on shifting from "4 separate state issues" to "one comprehensive national ecological asset" that requires landscape-level, scientifically informed management.

The Aravallis are not just a pile of rocks; they are the "great natural wall" protecting north India. Protecting them requires moving beyond moral arguments to a "governance" approach that includes strict, uniform laws across states, sustainable urban planning, and creating economic alternatives for local communities (e.g., eco-tourism).
