

## 6. Ban on New Mining Across Aravalli Range – Environment

The Union Ministry of Environment, Forest and Climate Change (MoEF&CC) has implemented a complete ban on granting new mining leases across the entire Aravalli range.

### Uniform Regulatory Framework for the Aravalli Range

The regulatory framework applies uniformly across all States through which the Aravalli range extends, namely

1. Delhi
2. Rajasthan
3. Haryana
4. Gujarat



This uniformity is crucial to prevent regulatory arbitrage, where mining and real estate pressures shift from stricter States to relatively lax jurisdictions. The overarching objectives are

1. Curtailing illegal and unscientific mining
2. Protecting ecological integrity and landscape continuity
3. Shifting from extraction-led growth to conservation-led development

### Protecting the Aravallis is Ecologically Critical

**Barrier Against Desertification-** The Aravallis function as a natural geomorphological wall, slowing the eastward expansion of the Thar Desert. They protect

1. Fertile tracts of the Indo-Gangetic plains
2. The National Capital Region (NCR) from advancing aridity

Degradation of the range accelerates desertification, dust storms, and heat stress in north-western India.

**Water Security and Hydrological Role-** The fractured rock system of the Aravallis facilitates

1. Groundwater recharge
2. Sustenance of aquifers feeding wells, lakes, and seasonal streams

Many urban and rural settlements in Rajasthan, Haryana, and Delhi depend indirectly on Aravalli-recharged aquifers. Mining disrupts this function by

3. Breaking rock strata
4. Blocking recharge pathways
5. Lowering water tables irreversibly

**Biodiversity Hotspot-** Despite being an ancient and arid range, the Aravallis support

1. Dry deciduous forests
2. Grasslands and scrub ecosystems

### Wildlife includes

1. Leopards
2. Hyenas
3. Jackals
4. Nilgai
5. Rich avifauna

The range acts as a critical wildlife corridor, especially between forest patches in Rajasthan and Haryana.

**Ecosystem Services of National Importance-** Air purification by trapping dust and particulates. Climate moderation by reducing heat-island effects. Soil conservation and prevention of erosion. Carbon sequestration through forest and scrub vegetation

**The Threat- Unchecked Mining and Anthropogenic Pressure-** Decades of illegal and poorly regulated mining have caused

1. Large-scale deforestation



2. Fragmentation of wildlife habitats
3. Depletion of groundwater
4. Severe air pollution due to dust and blasting

## SHIELD AGAINST DESERT



- Forest belt likely to run roughly from **Porbandar to Panipat**, covering entire Aravalli range and beyond
- 'Green wall' will act as barrier for dust from west and check eastward march of Thar desert
- It will check desertification by **restoring degraded land through massive afforestation**
- Project yet to get formal nod, details to be worked out

(The Times of India)

These impacts threaten the long-term ecological stability of north-western India, not merely local environments.

### About the Aravalli Mountain Range

**Geographical and Geological Profile-** One of the oldest fold mountain ranges in the world. Extends roughly 670 km from Gujarat to Delhi via Rajasthan and Haryana. Composed primarily of igneous and metamorphic rocks. Dates back to the Precambrian era, making it older than the Himalayas

**Climatic and Environmental Role-** Acts as a climatic divide between the arid Thar Desert, The relatively fertile Indo-Gangetic plains

**Influences-** Rainfall patterns in eastern

Rajasthan. Wind movement and dust transport

**Its degradation intensifies-** Heat waves, Dust storms, Erratic rainfall

**Institutional Roadmap for the Future- Role of ICFRE-** The Government has entrusted Indian Council of



Forestry Research and Education (ICFRE) with preparing a long-term, science-based conservation framework for the Aravallis. ICFRE functions under the Ministry of Environment, Forest and Climate Change and is India's apex forestry research institution.

**Headquarters-** Dehradun, Uttarakhand.

### Key Tasks Assigned to ICFRE

**Identification of Additional "No-Go" Zones-** Use scientific parameters such as Ecological sensitivity, Geological fragility, Biodiversity richness Demarcate areas where all mining and quarrying are permanently prohibited. This moves beyond ad-hoc bans toward objective, evidence-

based zoning.

### Management Plan for Sustainable Mining (MPSM)

Preparation of a **region-wide master blueprint** for the Aravallis. Core components

1. Cumulative impact assessment of all past and present activities
2. Evaluation of ecological carrying capacity
3. Zonation into Inviolable conservation areas Regulated use zones Restoration zones

No fresh mining approvals until the plan is notified.

### Public Participation and Democratic Environmental Governance

Draft MPSM to be placed in the public domain. Stakeholders include

1. Local communities
2. Environmental experts
3. Civil society and activists

### This ensures

1. Transparency
2. Social legitimacy
3. Conflict reduction in implementation

## Governance and Policy Significance

Reflects a shift from sectoral environmental regulation to landscape-level ecological governance.

Reinforces

1. Cooperative federalism (uniform standards across States)
2. Precautionary principle in environmental law

### **Aligns with India's commitments under**

1. Convention on Biological Diversity (CBD)
2. UNCCD (desertification control)
3. Climate adaptation goals

## Conclusion

Protecting the Aravallis is not merely a conservation issue but a strategic ecological necessity for

1. Water security
2. Climate resilience
3. Biodiversity protection
4. Sustainable urbanisation in NCR and western India

A science-based, participatory framework led by ICFRE offers a pathway to reconcile-

1. Environmental protection
2. Livelihood concerns
3. Long-term regional sustainability

The Aravalli initiative can emerge as a model for landscape-level environmental governance in India.

**Source-** <https://ddnews.gov.in/en/centre-imposes-complete-ban-on-new-mining-leases-in-aravalli-range/>