

A Critical Study of the Aravali Hills Case: Sustainability through Judicial Activism

Dr Srishty Banerjee¹, Dr. Ritika Juneja²

Sr. Assistant Professor of Law, VIPS-TC, VSLLS¹

Sr. Assistant Professor of Law, VIPS-TC, VSLLS²

Abstract

Establishing the obligation to properly conserve the Aravalli Hills and Ranges, one of the oldest geological features on planet earth, the Apex court reopened the Aravalli conservation issue marking a significant moment in Indian environmental justice. In northern part of the country, the Aravalli range plays a vital role in maintaining environmental balance, biodiversity, and climate stability. Paradoxically, fragmented governance and weak enforcement of environmental norms caused mining, urban expansion, and regulatory dilution which in turn resulted in ecological degradation. The present research tries to examine the judicial intervention through the lens of constitutional environmentalism. The study starts with analysis how the Court's decision to reopen the issue transcends procedural finality to address continuing environmental harm, intergenerational equity, and the public trust doctrine. It further tries to explore the Court's proactive approach in enforcing sustainable development principles, precautionary norms, and the right to a healthy environment as an integral component of the right to life. By situating the Aravalli case within the broader trajectory of Indian environmental jurisprudence, the paper argues that such judicial engagement reflects an evolving model of constitutional guardianship, where courts assume responsibility for safeguarding ecological interests.

Keywords: Aravalli hills, Supreme Court, Delhi, Sustainability, environment.

Introduction

The interaction between human societies and natural resources has been a core element in the evolution and progress of civilization across history (Baliyan, 2024). The debate over using natural resources for economic development has been in existence since ever. With the growth of human populations, the need for land has risen, resulting in the expansion of settlements at the cost of natural habitats like forests and wetlands which now is also adversely impacting the environment (Baliyan, 2024). Today, the Aravali hills is facing the consequences of such expansion and the so-called economic development. In November 2025 one very crucial environmental debate triggered after the Supreme Court's decision of adopting height-based definition of the Aravali Hills by uniform approach. The said decision ignited protests, dissents among stakeholders and renewed deliberations on balancing ecology, federalism and environmental justice. The situation led the court to rethink its own decision to bring balance between environmental protection, sustainability and administrative clarity. Essentially the dispute is not only about the measurements of the hills but the consequences of the administrative criteria to define the ecologically important mountain system. The ecological significance of Aravali does not lie in an absolute height measurement however in the functions it performs as a barrier to desertification as a mechanism for recharge of groundwater through fractured bedrock as a means of regulating local climate conditions and as a habitat for species with high diversity. Member of Parliament Mr. Ajay Maken reported to parliament that the Aravallis are responsible for the recharge of approximately 2 million litres of groundwater per hectare on an annual basis. These functional attributes have no direct correlation with the 100 m. threshold (Dubey, 2025). The methodology adopted in this paper is

Ecological significance of Aravali Hills

One of the oldest mountain ranges in the world is located in the north-western part of India i.e. the Aravalli range which presently, unfortunately has been reduced to residual hill ranges. The range spans across four Indian states from Gujarat to Delhi, with an average height of 600 to 900 m, these ranges play a prominent role, affecting the local climate and beyond, directing economic activities, leveraging geographical and

environmental resources and biodiversity profiles of the region (Gupta, 2022). The Aravalli mountain range in India holds a vital position in the country's geographical and environmental landscape. The range helps to maintain stable ecosystem and effective water distribution as it acts as a watershed between the Ganga and Indus basins (Baliyan, 2024). The range is also important to various plants and animals as it is home to them. For Delhi-NCR, the groundwater is recharged from this region, thus, holding special significance for this area (Gupta, 2022). The spread of desertification from western Rajasthan toward the eastern regions and the Gangetic plains is prevented by the range as it acts as a natural protector. We may face stronger and frequent dust storms if the degradation of this vital ecological barrier continues and unchecked. The significance of the range can be understood from the fact that it maintains adequate monsoon rainfall, thus, supporting diverse flora and fauna, rich biodiversity, local livelihoods, and agricultural activities across the adjoining states. The human activities have adversely affected the range causing its rapid degradation. In recent times, the increase in pollution and the decrease in groundwater reserves is result of uncontrolled development, exploitation of natural resources, quarrying, mining, and depleting forest ecosystems. Thus, the ongoing developmental activities has given rise to challenges of climate change in the areas of historic importance which once nurtured some of the earliest centres of Indian civilization. The range is not only a physical landform but plays an important role in region's environmental and climatic systems. , it is pertinent to maintain the range in its true spirit as it has immense benefits on air quality, soil erosion, weather patterns, and river networks (Baliyan, 2024).

Background of the Aravali Hills Judgement

Concernment over the illegal mining of the hills and the inevitable effect on sustainability is not new. In the last few years, the Supreme Court has many times come forward to ensure sustainable mining relying on two public interest litigation i.e., *T.N. Godavarman Thirumulpad and M.C.Mehta*. In 1995 *T.N. Godavarman* was filed to protect forest land in the Nilgiris but soon it paved the way for the conservation of biological diversity. The case also created environment awareness among the people acting as a stimulus in environmental conservation and protection on a large scale (Bhalla, 2025). The second is *Taj Trapezium* (M.C. Mehta v Union of India, 1985) case filed by the green avenger of India in 1985, is a radical judicial step in Indian environmental law. The case initially focused on the Taj Trapezium Zone and pollution in Delhi but later became the prime foundation for protecting the Aravalis in Delhi and Haryana. In 1996, the court extended its attention towards prohibiting mining and construction activities in the part of the Aravalis in Haryana. The reports by the Haryana Pollution Control Board and the National Environmental Engineering Research Institute emphasized the ecological degradation in parts of the range (Bhalla, 2025).

In the mid-2000s, the court on number of occasions passed multiple orders and directions prohibiting or regulating mining in the Aravali hills and for the removal of illegal encroachments. The court also called for environmental impact assessments and for establishing monitoring mechanisms to prevent degradations of Aravali hills range. The court clarified that proper environmental clearance is mandatory to continue mining. These orders later became the foundation of subsequent regulatory administration against illegal mining (Akhtar, 2025). In the past three decades more than 500 environmental matters have been reported in the south-west region of the Aravali range raising serious concern. Many cases are still pending in the environmental courts indicating the insufficient implementation of the laws and policies for the protection of environment (Arora, 2018). In May 2002, the Supreme Court banned all mining on the Delhi-Haryana border in the result of non-implementation of 1992 order in which the court specifically directed that mining and industrial activities in the Aravali range is subject to pre-approval by the central government. Afterward, the Rajasthan government redefined 'hill' through an amendment that any raised area which is less than 100 meters cannot be categorised as a 'hill' to circumvent the Supreme court's 2002 order (Yadav, 2019).

In 2024, the court noticed that one of the major limitations on the regulation of illegal mining on Aravali hills was due to different definitions of Aravali Hills/Ranges. Consequent to this decisive yet unsolved issue the court directed through an order dated 09.05.2024 that a committee should be constituted for providing a uniform definition of the Aravali hills and ranges.

In 2025, exercising its inherent and original jurisdiction, the Supreme court in *In Re: Issue Relating to Definition of Aravali Hills and Ranges* deliberated on the definition of Aravali Hills and Ranges and also focused on the need of the proper conservation of the hills in the States of Delhi, Harayana, Gujarat and Rajasthan (In Re: Issue

Relating to Definition of Aravali Hills and Ranges, 2025). The court cited the cumulative obligations of International Law and National Action Plan to Combat Desertification and Land Degradation, pressing the need of uniform and streamlined measures to be taken for the preservation and restoration of the Aravali ecosystem. The court also recited the urgent regulation of exploitation of the Aravali hills in a sustainable manner guided by the precautionary principle. The court also to the surprise accepted the definition and recommendations given by the committee based on elevation-based approach. The said judgement triggered criticisms and concerns amongst environmental experts, lawyers and civil society. The central issue as raised against the judgement was that such rigid criteria for defining the Aravali hills would result in causing the exclusion of vast stretches of ecologically critical topography that do not meet the height threshold but nevertheless are essential for groundwater recharge, habitat connectivity and climate moderation (Khan, 2026).

On 29th December 2025, acknowledging the concerns, the Supreme Court bench headed by Chief Justice of India Surya Kant took a *sue moto* cognisance, after public outrage over environmental concerns and put on hold the November 20 order recognising that the Geological and ecological systems do not function according to human made definitions. Acknowledging that a holistic evaluation of the ecological and geological importance of the Aravali hills should be done, a fresh committee of expert members to be constituted to address these ambiguities. By treating geomorphological evidence as determinative, the Indian Court restricts the long-standing practice of States justifying environmentally harmful activity through revenue descriptions alone. This materially strengthens the environmental rule of law by converting scientific assessment from a persuasive input into a binding reference point in regulatory decision-making. At the same time, the Court's reliance on expert committees reflects not judicial ambition but an administrative deficit. The Supreme Court also issued notices to the Central government and the concerned state governments and also kept its earlier order in abeyance until the expert committee is formed (Khan, 2026).

Analysis of the Judgment

In *Re T.N. GodavarmanThirumulpad v Union of India (2024)* the Court reiterated the ecological importance of the Aravalli range, highlighting its role in preventing land degradation, promoting groundwater recharge, and supporting important biodiversity. The Court pointed that reckless mining in the region creates challenges for ecological balance and thus, emphasises on the need to adopt uniform standards to ensure its protection. The Court further, defined that an Aravalli hill is any land rising 100 metres or more, and that two or more such hills within 500 metres form an Aravalli range. The Court prohibited the mining in core/inviolable areas with the exception that critical, strategic and atomic minerals and minerals listed in the Seventh Schedule of the MMDR Act 1957 may be granted in Aravalli Hills and ranges. The Court accepted the recommendations for sustainable mining in Aravali Hills and Ranges and the steps to be taken for preventing illegal mining in Aravali Hills and Ranges. The Court directed MoEF& CC to prepare a Management Plan for Sustainable Mining (MPSM) through Indian Council of Forestry Research and Education (ICFRE) for entire Aravalli's extending from Gujarat to Delhi in order to identify permissible areas for mining, ecologically sensitive, conservation- critical and restoration-priority areas within the Aravali landscape where mining shall be strictly prohibited or permitted only under exceptional situations. Further, incorporate a thorough analysis of cumulative environmental impacts and the ecological carrying capacity of the region and include detailed post-mining restoration and rehabilitation measures. The Court further directed that till the MPSM is finalised by the Ministry of Environment, Forest and Climate Change (MoEF&CC) through ICFRE, no new mining license should be granted. Furthermore, when the MPSM will be finalised, mining will be allowed only in those areas wherein sustainable mining could be permitted and, In the meantime, the mining activities in the mines which are already in operation would be continued in strict compliance with the recommendations made by the Committee regarding sustainable mining in the report.

However, subsequently, the Supreme Court stayed its order that had accepted a uniform definition of the Aravalli Hills and ranges, which defined it as any landform in designated Aravalli districts with an elevation of 100 metres or more above its local relief and an "Aravalli Range" will be a collection of two or more such hills within 500 metres of each other. following widespread protests by environmental groups and political parties over the decision.

The judgment has emphasized on the distributive Justice that concerns the fair allocation of benefits and burdens across society, particularly regarding natural resources and environmental impacts. The judgment administers ecological distributive justice, ensuring that the benefits of natural resources and its burdens are shared equitably among present and future generations. By discontinuing mining operations, the Court sought to ensure that environmental costs were not unfairly imposed on vulnerable populations and future generations.

Inter-Generational Justice

In India, the duty to protect natural resources for future generations is a legal mandate rooted in the country's jurisprudence on sustainable development (Mr. Achint Dubey). Accordingly, the present generation bears the responsibility of conserving the Aravalli Range—over 1.8 billion years old—for those who will come after. Permitting large-scale mining in these ancient formations would breach the principle of safeguarding resources for future generations (Mr. Achint Dubey). Thus, the direction of the court that an MPSM be developed before awarding mining leases signifies that the court has made all efforts to prevent irreparable damage that may occur.

Procedural Justice and Participatory Governance

Procedural justice is significant as it focuses on the *fairness of the process* used to reach a decision, rather than just the decision. The judgment ensured that the process of decision making is not arbitrary and included the ones having expert knowledge involving central and state governments, Forest Survey of India, Geological Survey of India, and the Central Empowered Committee. This inclusive decision-making ensured voice of the experts. Further, the judgment also gave timelines i.e. 6 months for mapping of the Aravali Range by FSI, 2 months for the committee to submit its report on a uniform definition, Direction for regular biennial evaluation of cumulative impacts. This created accountability and prevented bureaucratic delays, ensuring that procedural justice is not defeated.

Precautionary Principle and Sustainable Development

The Precautionary Principle is very significant in environmental jurisprudence as it provides that where there are threats of serious or irreversible environmental damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. In the present judgment, the Court has specifically incorporated this principle by ordering a Management Plan for Sustainable Mining (MPSM) before allowing new mining leases. The MPSM is designed to identify ecologically sensitive, conservation-critical, and restoration-priority zones, assess cumulative environmental impacts and determine ecological carrying capacity. This ensures that mining proceeds only in areas where there is minimal ecological disruption. Further, the principle of sustainable development is also included in the present judgment as the judgment has not outrightly banned mining activities but has allowed the same keeping in view the damage that it could cause.

Environmental Justice through Scientific and Evidence-Based Governance

One of the important principles of environmental justice is that it ensures the benefits and burdens of natural resources are shared equally among generations and populations. This can be achieved only with the inclusion of objective, transparent, and scientific decision-making processes. The judgment has taken into consideration all these aspects and then has arrived at the decision. The Court emphasized geo-referenced ecological assessments, EIA studies, and cumulative impact evaluations. Thus, the Supreme Court's ruling represents a paradigm shift in Indian environmental jurisprudence—moving away from political discretion and toward science-driven, evidence-based governance as a foundation for Environmental Justice.

Conclusion

The ecological importance of Aravalli is vital as it serve as a natural heritage and a shield to protect the environment of the nation. The Government corresponding to the directive principles of state policy is committed to preserve the environment, sustainable development, ecological preservation and transparency. Consequent to this responsibility the government make coordinated efforts with the Ministry of Environment,

Forest and Climate Change to protect Aravalli Hills. The Apex court's *Aravalli* judgment is an imperative in the direction of ecologically truthful governance. It reaffirms that environmental protection is an essential part of the constitutional values safeguarded by Article 21 of the Constitution of India. The Court has magnificently set a strong normative foundation by introducing a criterion based on scientific principles for defining the *Aravali range* and invoking doctrines of vital importance like Inter-Generational Equity and Precautionary Principle. However, the judgment also criticised triggered by placing reliance on expert committees to define the range reflecting not judicial ambition but an administrative deficit. This situation presents an institutional vacuum reflecting the absence a statutory guide for ecological mapping on uniform basis and the obliviousness of scientific evidence into routine ordinance. This instance of judicial mediation is evidence of institutional vacuum. Criticizers argued that such definitions and conceptual interpretation based on elevation not only bypass the democratic processes but also impact federal-State relations, particularly in the matters where decision on land-use intersect with State autonomy. The Aravalli decision irrespective of its administrative virtues represents a step back from commitments towards environmental protection based on constitutional values. Recognizing the fact that environmental systems are not only complex, but interdependent on various factors and also of uncertain nature, the Court kept its order in abeyance. The Court has called for suggestions from independent environmental experts, to revisit the definition recognising the ecological importance of the Aravalli range. The matter is still pending for further interpretation and protection of the Aravalli range. The Aravalli is a very critical mountain range in our country. It is of vital importance for the states defining not only the history, tradition and culture but also have influence on climate, geography and environment, economy and food security of millions of people.

References

1. Akhtar, S. (2025). Strengthening Environmental Governance in India : Legal Frameworks for Sustainable Development. *International Scientific Refereed Research Journal*, 72-77.
2. Arora, S. (2018, September 13). Times of India. "Raze All 'Illegal' Buildings, Impose SC Order on Entire Aravalis. India.
3. Baliyan, D. R. (2024). The Spine of Haryana: Ecological and Historical Significance of Aravalli Hills. *International Journal of Innovative Science and Research Technology*, 363-366.
4. Bhalla, V. (2025, December 31). *With SC stay on Aravallis judgment, tracing the apex court's past intervention*. Retrieved from Indian Express: <https://indianexpress.com/article/explained/explained-law/sc-stay-aravallis-legal-interventions-history-10444669/>
5. Dubey, A. (2025). The Aravalli Judgement and the Precautionary Principles: A Critical Assessment of Environmental Jurisprudence. *Indian Journal of Law and Legal Research*, 2582-8878.
6. Gupta, H. (2022). Geographical analysis of environmental crisis and conservation in Aravali mountain region. *IOSR Journal Of Humanities And Social Science* , 74-84.
7. In Re: Issue Relating to Definition of Aravali Hills and Ranges (Supreme Court of India November 2025).
8. Khan, D. R. (2026, January 19). *livelaw*. Retrieved from The Aravalli Verdict and India's Green Constitutionalism: A Watershed Moment in Ecological Jurisprudence: <https://www.livelaw.in/articles/aravalli-environmental-governance-519508>
9. Mishra, S. K., & Sharma, R. K. (2017). Media concern on environmental issues. *Communication Today*, 19(4), 83–93. *M.C. Mehta v Union of India* (Supreme Court of India December 1985).
10. Mr. Achint Dubey, M. S. (n.d.). THE ARAVALLI JUDGMENT AND THE PRECAUTIONARY PRINCIPLE: A CRITICAL ASSESSMENT OF ENVIRONMENTAL JURISPRUDENCE OF INDIA . *Indian Journal of Law and Legal Research* , 3863-3878.
11. Sharma, R. K. (2018). Media and youth engagement: Development, governance and participation. *Vivekananda Journal of Research*, 7(2), 56–68.

12. Sharma, R. K., & Tripathi, D. (2024). From likes to lives: Unravelling the impact of social networking sites on youth. HP Hamilton Limited.
13. Yadav, S. (2019, May 25). Continual Diminishing of the Aravalli Hills Assessing Intergenerational Equity . *Economic and Political Weekly*, pp. 15-17.