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Architectural Thresholds of Sacred Groves: Cultural, Spatial, and Ecological Interfaces

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1. Abstract

Sacred groves in India represent enduring forms of socio-cultural praxis in which ecological conservation is embedded within ritual practice, spatial organization, and community governance. While widely recognized for their biodiversity value, sacred groves remain insufficiently integrated into formal environmental and urban planning frameworks. This paper argues that the architectural thresholds mediating grove and settlement—such as plinths, courtyards, shrines, pathways, and vegetative edges—function as spatial governance mechanisms that regulate access, shape collective behaviour, and sustain ecological resilience through culturally embedded norms.

Using qualitative interpretive analysis of interdisciplinary literature and documented sacred grove landscapes, the study examines how these transitional spaces operate as informal regulatory systems. Unlike rigid zoning mechanisms, sacred grove thresholds employ graded spatial transitions that integrate ecological buffering with ritual meaning and community participation. These thresholds embody decentralized governance models consistent with participatory principles envisioned in Indian environmental legislation.

The paper further analyses how rapid urbanization, land-use change, and infrastructure expansion disrupt these culturally embedded interfaces, placing sacred groves in a policy grey zone—culturally significant yet administratively fragile. Existing frameworks such as the Biological Diversity Act (2002), Forest Rights Act (2006), and Environmental Impact Assessment regulations inadequately recognize sacred groves as socio-spatial conservation systems.

By situating sacred groves within Indian policy discourse, this research proposes planning and governance recommendations, including formal recognition as cultural-ecological conservation zones, integration into biodiversity registers, participatory buffer zone policies, and inclusion in urban ecological networks. The study positions sacred groves not as relics of tradition but as living governance models capable of informing sustainable and culturally grounded environmental policy.

Keywords: Sacred groves, socio-cultural praxis, environmental policy, community-based conservation, cultural landscapes

2. Introduction

Socio-cultural praxis refers to the lived practices through which communities produce, regulate, and sustain their environments. In India, sacred groves exemplify such praxis by integrating spiritual belief, ecological stewardship, and spatial organization into cohesive systems of community governance. These landscapes are not merely forest fragments; they are culturally regulated ecological reserves embedded within settlement patterns.

Despite their documented ecological importance, sacred groves occupy an ambiguous position within formal environmental governance. National legislation emphasizes biodiversity conservation and community participation, yet sacred groves are rarely

recognized explicitly as culturally embedded spatial systems. Modern planning frameworks prioritize zoning, infrastructure expansion, and revenue classifications, often overlooking ritual landscapes.

This paper examines sacred groves as models of spatial governance and explores how their architectural thresholds offer policy-relevant lessons for integrating socio-cultural conservation into Indian environmental planning systems.

3. Literature Review

Scholarly research identifies sacred groves as traditional conservation systems sustained through belief systems, taboos, and collective norms (Bhagwat & Rutte, 2006; Ormsby & Bhagwat, 2020). These groves preserve biodiversity, protect water systems, and maintain microclimates.

The concept of cultural landscapes positions sacred groves as spaces where ecology, ritual, and identity intersect (Verschuren et al., 2010). Architectural theory emphasizes thresholds as transitional zones shaping behaviour and perception.

However, Indian environmental governance frameworks such as the Biological Diversity Act (2002) and Forest Rights Act (2006) treat conservation primarily through administrative classification. Sacred groves often fall outside formally recognized forest categories, limiting statutory protection. Environmental Impact Assessments focus on measurable ecological indicators while overlooking cultural-spatial systems.

This disconnect reveals a policy gap between indigenous socio-cultural praxis and formal governance mechanisms.

4. Objectives

1. To examine architectural thresholds in sacred groves as mechanisms of informal spatial governance.
2. To analyse how these thresholds embody socio-cultural praxis.
3. To identify policy gaps in Indian environmental and planning frameworks.
4. To propose policy-oriented recommendations integrating cultural landscapes into governance systems.

5. Research Methodology

The study adopts a qualitative interpretive framework comprising:

- Interdisciplinary literature review on sacred groves, cultural landscapes, and environmental governance.
- Comparative spatial analysis of documented sacred grove landscapes in rural and peri-urban India.
- Policy analysis of relevant Indian legislation and planning instruments.

The research synthesizes spatial, cultural, and governance dimensions to derive transferable policy insights.

6. Research Problem / Hypothesis

Research Problem:

Sacred groves in India remain inadequately integrated into formal environmental and planning policy frameworks, leading to fragmentation and vulnerability.

Hypothesis:

Architectural thresholds in sacred groves function as socio-cultural governance mechanisms that can inform decentralized, culturally grounded environmental policy models.

7. Analysis and Interpretation / Findings

The findings reveal sacred grove thresholds as layered governance tools:

7.1 Spatial Buffering as Regulation

Vegetative edges, plinths, and courtyards create graduated transitions that protect ecological cores, functioning similarly to statutory buffer zones.

7.2 Ritual Norms as Behavioural Enforcement

Shrines and symbolic markers embed conservation ethics within belief systems, reducing reliance on external enforcement.

7.3 Controlled Circulation

Defined pathways regulate movement, minimizing ecological disturbance.

7.4 Community Stewardship

Threshold spaces facilitate collective gathering, reinforcing social ownership and participatory governance.

7.5 Policy Blind Spots

Sacred groves lack consistent land-use classification, are inadequately documented in biodiversity registers, and remain absent from urban green infrastructure planning.

8. Conclusion

Sacred groves demonstrate how ecological resilience can be sustained through socio-cultural praxis embedded in spatial design. Their architectural thresholds function as informal yet effective governance systems integrating ritual, ecology, and community participation. Recognizing these mechanisms within Indian environmental policy can bridge the gap between indigenous conservation models and formal planning frameworks.

9. Suggestions / Recommendations

1. Recognize sacred groves as Cultural-Ecological Conservation Zones in Master Plans.
2. Mandate inclusion in People's Biodiversity Registers.
3. Strengthen Gram Sabha authority under PESA and the Forest Rights Act.
4. Incorporate cultural landscape assessment in EIA procedures.

5. Establish graded buffer zone policies reflecting traditional spatial transitions.
6. Integrate sacred groves into urban ecological corridors and climate resilience strategies.
7. Promote inter-ministerial coordination for cultural-ecological governance.

Policy Impact Statement

This research contributes to Indian environmental governance by reframing sacred groves as living models of decentralized conservation rather than peripheral cultural artifacts. By identifying architectural thresholds as mechanisms of socio-cultural regulation, the study offers a framework for integrating intangible cultural practices into formal planning instruments.

Policy recognition of sacred groves as cultural-ecological infrastructure can strengthen biodiversity conservation while empowering local governance institutions. Embedding sacred landscapes within master planning, biodiversity documentation, and environmental impact procedures can reduce conflicts between development and community stewardship.

In an era of rapid urbanization and ecological vulnerability, sacred groves provide scalable governance lessons rooted in participatory practice, spatial sensitivity, and ecological ethics. Incorporating these principles into Indian policy frameworks can foster sustainable development models that are culturally grounded, socially inclusive, and environmentally resilient.

10. References

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