WAT-41 ORAL PRESENTATION · WATER TRACK · URBAN WATER & RESILIENT INFRASTRUCTURE

Johads as Resilient Urban Water Bodies: Reimagining the Climate Discourse in India

P. Kumar[1*]

[1]*Department of Political Science, University of Delhi, Delhi, India*

**Corresponding author: pkumar@polscience.du.ac.in*

DOI: https://doi.org/10.31705/ICEWSE.2026.77

Abstract

This paper examines the relationship between water and climate change by contextualising Johads (traditional water reservoirs) in the North Delhi district within the discourse on climate adaptation, mitigation, and resilience in India's National Capital. It argues that the water crisis cannot be addressed only through technological and infrastructural interventions, and that the revival of traditional water bodies and the knowledge systems associated with them is critical for building climate-resilient cities. The paper first discusses the growing importance of blue infrastructure in responding to climate change, particularly amid rising heat, flooding, water scarcity, groundwater depletion, and shifting rainfall patterns. It then examines the growing recognition of Indigenous Knowledge Systems and Practices in global climate governance and argues that India's climate politics have nevertheless continued to privilege particular knowledge systems and economic interests in water governance. The paper then focuses on Johads as socio-ecological structures that contribute to physical, psychological, social, cultural, and ecological well-being. Their restoration can support groundwater recharge, flood mitigation, urban heat reduction, and community well-being. Finally, the paper proposes three steps for protecting Johads: identification, demarcation, and notification. The paper also introduces geo-cultural mapping as a participatory approach that integrates GIS and remote sensing data with local knowledge and cultural practices. Methodologically, it is based on the use of digital humanities to map narratives and indigenous oral history to document knowledge. Using a comparative analysis between Holambi Kalan village in Delhi and Manipur village in Ahmedabad, the study demonstrates how geo-cultural mapping can help document and protect disappearing water bodies.

Keywords: *geo-cultural mapping; indigenous knowledge systems; johads; North Delhi*