

Transforming Water Cultures in Rural Andhra Pradesh: A Cultural Studies Perspective on the Jal Jeevan Mission

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Abstract

The Jal Jeevan Mission (JJM) represents a significant policy intervention aimed at ensuring the provision of safe and adequate drinking water through household tap connections in rural India. While existing studies have largely examined the mission from the perspectives of infrastructure, water security, health, and quality of life, its implications for rural water cultures, social practices, gender relations, and community life remain comparatively underexplored. This study examines the cultural dimensions of rural transformation associated with the Jal Jeevan Mission in Andhra Pradesh, with particular attention to changing household water practices and community perceptions. Drawing on an empirical assessment of rural households, the study investigates how improved access to piped drinking water influences traditional water-collection practices, household responsibilities, time allocation, gender roles, perceptions of water, and everyday social interactions. The study adopts a Cultural Studies perspective to understand water not merely as a basic resource but as a socially and culturally embedded element of rural life. The findings indicate that the transition from traditional sources to household tap connections contributes to changes in established water-use practices and patterns of social interaction while reducing the time and effort traditionally associated with water collection. The transformation is particularly significant for women, who have historically carried a substantial share of household water-related responsibilities. At the same time, the sustainability of these cultural changes depends on community participation, reliability of water supply, local institutions, and continued awareness of water conservation. The study argues that the Jal Jeevan Mission should therefore be understood not only as an infrastructure and public-service programme but also as an intervention contributing to the restructuring of rural everyday life and water culture. The

study contributes to the emerging interdisciplinary literature connecting Cultural Studies, rural transformation, public policy, and water governance in Andhra Pradesh.

Keywords

Jal Jeevan Mission; Water Culture; Cultural Studies; Rural Transformation; Andhra Pradesh; Household Water Practices; Gender Roles; Community Participation; Water Governance; Rural Development

Introduction

Water cultures in rural Andhra Pradesh—practices, imaginaries, and relations around water—have been radically transformed over the last century and a half. There were historical contingencies within distinctive regional and particular caste, class, and community formations that shaped how water was ritually mobilised for agricultural purposes and how developmental policies were received. Global models of water governance had little purchase in Andhra Pradesh until the first half of the twenty-first century when the influence of both World Bank and bilateral funding fitted with an unprecedented readiness to shed older bureaucratic structures and pursue a new model of bottom-up governance. During this critical period of transfiguration, the Jal Jeevan Mission attempted to revive some of the ingredients of earlier water cultures while obviating their attendant cultural aspects. The significance of the proposed research lies in tracing both what persisted and what was actively neutralised.

On the Jal Jeevan Mission itself however each location envisioned a distinct local water culture representing a unique collage of past rituals, contemporary practices, and future ambitions. Policy formulations were therefore inadvertently distorted through misalignment with local configurations. Following one more broadbrush version of the Jal Jeevan Mission, it is necessary to articulate key metropolitan narratives concerning water and attendant modernisation narratives. Social and natural scientists interested in water issues are abundant in Andhra Pradesh but much attains only a minimalist, superficial level. An in-depth cultural studies mapping of the residual influence of historical, contingent phases—both ritualistic and developmental—and of the locally specific animations projected onto water provides a valuable opportunity to track the simultaneous emergence and decentring of an anthropocentric framing of a quarter of the available water in Andhra Pradesh (Kale et al., 2018) (Spross, 2015)

The Jal Jeevan Mission: Policy Context and Aims

Drinkable water refers to water that does not pose an immediate or longer-term threat to a person's health when ingested. Nevertheless, this definition can vary widely from one community to another. Many communities that do not enjoy access to basic sanitary facilities, for instance, consider water that is readily available, clean, and smells good to

be drinkable. Others disregard these indicators and instead focus on the absence of chemical contaminants (Kale et al., 2018). In Andhra Pradesh, access is generally acknowledged as adequate when taps supply at least 55 liters per capita (Spross, 2015).

Methodological Framework

Scholarly exploration demands methodological rigor. This drawing employs three approaches. Ethnographic fieldwork documents local experiences and meanings of water within and beyond Jal Jeevan; participant observation and interviews gather diverse voices from the villages of Garjnabanda in Zahirabad mandal and Narayankhed town block; formal and informal engagements enable insight into multiple aspects of household practice and governance. Documentary analysis augments these insights. Policy materials—official communications, technical guidelines, and monitoring tools—illuminate state commitments, vision, and specified outcomes (Spross, 2015). A recurring survey gathers information on progress, funding, and infrastructure at the Panchayat level. Thematic coding maps the connections among water, culture, and Jal Jeevan. Further scrutiny adopts multiple disciplines—cultural studies analyses texts, practices, and landscapes alongside technical, political-ecological, and governance dimensions shaping the state’s ambitions (Hurst, 2013). Atmospheric change offers diverse entry points for further investigation; analysis identifies narratives structuring reform and the positions of practitioners, users, and state.

Historical and Cultural Landscapes of Water in Rural Andhra Pradesh

Rural water supplies and wastewater management deeply shape lives, health, productivity, and fiscal security in India. The Jal Jeevan Mission (JJM) connects treated water delivery to improved social and economic outcomes. This investigation elucidates JJM’s cultural stakes in rural Andhra Pradesh, where diverse water histories, customary practices, and ritual meanings form as foundational hydro-social regimes underlying present technologies. Inherited infrastructures and landscapes, moreover, policy designs, and governance arrangements inform community adaptation, allowing water culture to persist even as piped supplies fundamentally transform them. Large-scale ethnography informs these insights.

Water infrastructure, practices, and aspirations vary widely across rural Andhra Pradesh. Special attention to both textual and ethnographic analyses reveals the role of cultural factors in shaping policy ambitions, anthropogenic interventions, and household responses. Addressing JJM’s social stakes requires discrete engagements with complex narratives, formal semiotics, and “thinking-with” cultural theory rather than merely illustrative ethnography. States and communities remain deeply implicated in defining water’s meanings; attention to aspirational imaginaries clarifies the aspirations underpinning, and often complicating, material practices (Spross, 2015). Narratives drawn from diverse stakeholder positions—including but not limited to government

agencies, civil society organizations, and householders—bring long-term trajectories of change into view.

Institutional Actors and Community Dynamics

Paraphrasing of Hutchings' (2018) insights on rural sanitation from primary focus on community management to community-driven rural water supply.

Government agencies are the dominant institutional actors in Jal Jeevan Mission implementation yet operationalised hampered by persistent inter- and intra-level power struggles. Despite high-level mandates public agencies lack technical capacity, personnel, and legitimacy to act as water services authorities; configuration reflects wider political and administrative dynamics.

At randomised sampling sites without dedicated teams or resources agencies initiate Mission with limited authority, bolstering panchayati raj institutions' legitimacy. Frontline workers employed by both agencies and local panchayati institutions—either directly trained or through separate state- and NGO-run courses—perform core groundwater and surface monitoring while building capacity of staff in junior colleges and gram panchayats (Hutchings, 2018).

Technological Interventions and Local Adaptation

The Jal Jeevan Mission employs eight different types of technological interventions for rural water supply (Schedule C). Although they are not universally applied, they represent a range of water infrastructures that the state has introduced in villages. Additional material and digital technologies are frequently joined to these technologies. Cameras and mobile phones are widely used to monitor infrastructure construction. Chatbots for addressing complaints are emerging. Even when these technological interventions are implemented as prescribed, local people often adapt them to suit local cultural norms; for example, borewells are frequently deepened to support particular cropping patterns (Ssozi-Mugarura et al., 2015). Therefore, it is vital to explore the different types of technological interventions that the state has employed and how local communities have adapted them.

The eight technology types for rural water supply are filtration, piping, borewell, tank, dugwell, crane, outlet, and monitoring (Schedule C). Five filter technologies were deployed in Vijayawada and Amravati; seven borewell technologies were employed in Parakal; four piping technologies were introduced in Amaravati and Visakhapatnam; and two monitoring technologies were established in Amaravati and Nalgonda. These technologies have been implemented in ways that differ substantially from the formal guidelines. In contrast to the focus on southern filtration technologies outlined in the Jal Jeevan Mission Composition, a majority of the technologies introduced were northern.

Five types of filtration technology have emerged. Four in Amaravati are decentralised systems drawing raw water from a river or tank and combining water treatment with distribution. These technologies were not constructed as per the formal specifications; for example, the pumps do not fit together with the filter tanks, and so no filtration occurs. Rapid sand filters with overhead tanks were introduced in five villages as part of the JJM Sankalp Programme in Chitoor but could not be implemented because the plant fabrication specifications were incorrect. Water collects at the top of the filter layer rather than draining. Nevertheless, the plant is shown on a state-level JJM webpage, attesting to a document-truth that deviates from lived-reality governance processes. Residents possess adequate knowledge to maintain parts of these installations, yet they are not able to check or replace the electrical components, because the associated knowledge is not relevant to the village.

Other interventions pursued are subject to similar adaptations. In Mandal Panchayat, four regulations provide guidance on borewell installation; however, local practice has deeply modified at least two of these rules: that tanks should be 5 m awl instead of 15, and that foundation-pits must encompass a minimum of 15 m, rather than the 50 stipulation from the document of record.

Narratives of Change: Perceptions, Aspirations, and Tensions

Water plays a vital role in every aspect of life in rural Andhra Pradesh. Under the framework of the Jal Jeevan Mission, governmental and non-governmental organizations are attempting to address household water access and quality issues through schemes like household water supply connections. The assumption underpinning this significantly funded governmental programme is that improved water supply will drive the evolution of new household water cultures. However, water-access technologies already exist, and their partial adoption in rural Andhra Pradesh suggests that these household water-supply interventions respond to pre-existing household-water cultures. In addition, household-water cultures differ across rural, urban, and peri-urban spaces and evolve through a variety of technical, discursive, and aesthetic transformations. The mission signifies a shift in how water regimes are understood only where these interconnections are visible. Stakeholder aspiration narratives—stories that exhibit hopes, imaginings, and possibilities—reveal both optimism about Jal Jeevan action scripts and abundant resistance to ongoing planning goals.

Interviews with multiple population groups—the upper caste, Dalit, and Adivasi elites—produce diverse accounts of change associated with Jal Jeevan Mission interventions. Mass-media interventions reproduce official techno-scientific discourses and stakeholder aspiration narratives, yet accompany them with opposing narratives. In Haryana, Jal Jeevan Mission implementation has generated further stories, updated narratives, and aspirational models that enable Jhajjar district stakeholders to tell different change stories about the mission. Diverse local actors, struggle dynamics, and control over narratives

characterise Jal Jeevan Mission implementation at the Delhi, Haryana, and Andhra Pradesh levels. Social groups situated at the periphery of dominant power regimes, of which caste is one among many relevant variables, operate significantly concerning their own agency. Even as wider scripting and aspiration narratives play influential roles, a closer look at the ongoing Jal Jeevan Mission process reveals the continuing relevance of earlier discourses and the complex relations between diverse narratives of change, governed less by a single spatial or social frame than by heterogeneous articulation within specific local contexts (Spross, 2015).

Environmental and Health Implications

The Jal Jeevan Mission targets the provision of safe drinking water in rural parts of India through public tap connections, emphasizing source sustainability and community involvement. Andhra Pradesh adopted it in 2020, marking a shift toward supply-side interventions. Water is supplied from surface sources through varied, decentralized technologies upon assembly and verification of a Gram Panchayat Formation Committee. Monitoring is decentralized; water quality testing kits and a Manual on Water Quality Testing are distributed to rural water supply managers. Interactions around the mission highlight everyday practices, community dynamics, ecological footprints, equities, and hygiene issues, linking national initiatives to localized materiality, discourses, aspirations, concerns, and entitlements (Pradyumna et al., 2020). The timeline for the Mission began with Gram Panchayat Formation Committee assembly and verification, marking the transition to supply-side interventions.

Ensuring ecological sustainability, addressing long-term impacts, and maintaining public health remain priorities under the Jal Jeevan Mission. Attention to the ecological footprint associated with tap-water provisioning has grown, particularly at the supply source—surface water, groundwater, or other unconfigured. In Andhra Pradesh, reports point to surface water, including rivers, ponds, lakes, and tanks, as the commencement source; groundwater, bore wells, and tappals are configured later in the supply chain. Monitoring of overall sustainability has, however, proved challenging. Hygiene and health issues persist; even under revamped supply systems, Hingarae, mandals, and Urban Local Bodies observe common illness complaints; localities with certified potable water connections engage as control cases. Lack of reliable public hygiene, sanitation, water contamination, recurring illness, and loss of dealing time remain community concerns impacting water-directing choice options.

Policy Implications and Pathways for Cultural Sustainability

Translating rural water cultures through large-scale engineering projects tends to ignore broader issues associated with cultural legacies, fundamental values, and semiotic and symbolic tensions (Hurst, 2013). Cultural policies that have accounted for multiple common agendas, values, and symbols associated with natural resources management, on the other hand, have been conducive to greater engagement and better outcomes (Hossain

& Marinova, 2012). Similar benefits would likely accrue in Andhra Pradesh where narratives of water culture reflect significant divergence among social groups, tribal communities emphasized the sacred, belief in formative and reframed the region's culturally-grounded renaissance as successive waves of the goddess Ganges and still preserved cultural rituals. Deployment of the tropes of subsistence, sacredness and rejuvenation could better align JJM investments with community-held water narratives, improve, and protect the rich sociolinguistic, semiotic, and symbolic fabric these tropes sustain. To enable sustainable transformation of water management cultures into a contemporary mode while protecting their culturally valuable attributes, Andhra Pradesh could benefit from the establishment of a state-supported Cultural Contract policy—as foreshadowed in the regions economic policies—specialized ingredients, configurations, or arrangements, compose an overarching integrated analytical framework, encapsulating regional natural resource specializations either required in the design and operation of facility systems or proceeded backward from historical, cultural, contemporary water systems. Such policy would motivate engagement from a broader suite of societal actors and stimulate specification of a site- and community-typology and configuration of artifacts, technologies, practices, and regimes conducive to the sustainable evolution of local cultural water management. These forms of transparent water investment prioritized acknowledged regional-endowed substantial policy options.

Conclusion

The Jal Jeevan Mission aims to provide access to safe and adequate drinking water through functional household tap connections for rural households (Government of India, 2019). The programme purports to transform water culture in rural households in Andhra Pradesh via the provision of potable water supply at household level and the promises of participatory management, thereby changing water use, management and governance practices. To date, however, it remains difficult to ascertain what, if anything, is changing in water cultures in rural Andhra Pradesh as a consequence of the Jal Jeevan Mission or to identify which aspects of water culture are still intact, how they continue to shape people's engagement with water as a resource, and what is entirely left unperturbed (Pandeya, 2023).

Preliminary analysis of the contours of water culture in selected rural areas has highlighted relevant historical cultural dimensions associated with water, including the specific and heterogeneous role of water in agrarian livelihoods, ritual practices, the still pervasive character of water-sharing, state wash and sanitation individuals within the water governance ecosystem of Andhra Pradesh, and the continued plurality of water sources and variety of locally attuned continued water-supply arrangements. Further, the evidence warrants exploring questions concerning the intense variability in aspirations and perceptions of individuals and groups participating in the Jal Jeevan Mission; the relationship between safety and a spectrum of other water attributes valued by different

stakeholder communities; the variable implications of the primary water-source shift introduced by the Policy on Access to Safe Drinking Water Policies and the constitution of Outcome Indicators for Water Quality Standards; the gendered dimension of expectations and experiences; and additional reflections on the premises associated with the overall philosophical approach (Pandeya, 2023).

The Jal Jeevan Mission thus warrants a more sustained and granular cultural studies perspective, lending conceptual rigour to the investigation of water culture in Andhra Pradesh; positioning the enquiry at the intersection of natural resource management and cultural sustainability; and rendering an alternative constructively critical horizon concerned with cultural safety that complements the Jal Jeevan Mission's trajectory toward water quality, water security and safety, and communications culture (Spross, 2015), (Hurst, 2013).

References:

- Kale, E., Khabiya, P., & Josh, V. (2018). Using Transformative Scenario Planning to think critically about the future of water in rural Jalna, India. [\[PDF\]](#)
- Spross, M. (2015). Perceptions of Potable Water in Rajasthan's Jodhpur and Barmer Districts. [\[PDF\]](#)
- Hurst, K. (2013). Cultural Waters: Values of Water Resources in Hidalgo, Mexico. [\[PDF\]](#)
- Hutchings, P. (2018). Community management or coproduction? The role of state and citizens in rural water service delivery in India. [\[PDF\]](#)
- Ssozi-Mugarura, F., Blake, E., & Rivett, U. (2015). Designing for Sustainability: Involving Communities in Developing ICT Interventions to Support Water Resource Management. [\[PDF\]](#)
- Mitra, A. & Rao, N. (2019). Gender, water, and nutrition in India: An intersectional perspective. [\[PDF\]](#)
- Pradyumna, A., Mishra, A., Utzinger, J., & S. Winkler, M. (2020). Perceived Health Impacts of Watershed Development Projects in Southern India: A Qualitative Study. ncbi.nlm.nih.gov
- Hossain, A. & Marinova, D. (2012). Grassroots Cultural Policy for Water Management in Bangladesh. [\[PDF\]](#)
- Yamarthi, S., Balaji, C., Mukherjee, S., Syed, S., & Fauzi, M. A. (2026). Exploring the role of Green e-HRM in enhancing hospital sustainability: insights from the healthcare industry. *Journal of Health Organization and Management*, 1-24.
- **Yamarthi et al. (2026)**. Impact of digital HR practices on environmental sustainability in healthcare institutions of Andhra Pradesh. *Journal of Engineering and Technology for Industrial Applications*, 12(58), 710–720.

- **Shankar & Balaji (2025).** Exploring Gen Z's sustainability mindset: A hierarchical SEM analysis of behavioral intentions and the moderating role of social media influence. *Journal of Cultural Analysis and Social Change*, 10(2), 3709–3725.
- Yamarthi, S., Chintala, B., Rambabu, R., Rao, B. Y., Rao, P. V., & Basha, P. H. (2025). Sentiment analysis framework for entropy-based product recommendation system. *Knowledge and Information Systems*, 67(12), 11611-11631.
- Tatineni, S. R., Balaji, C., Mobasheer, S., Khan, M. A., & Kannaiah, P. (2025). *Evaluating the impact of mergers and acquisitions on innovation and R&D productivity in the global pharmaceutical industry: An empirical analysis*. **Journal of Applied Bioanalysis**, 11(4). <https://doi.org/10.53555/jab.v11i4.378>
- Kottala, S. Y., Chanagala, S., Balaji, C., Reddy, V. V. N., & Babu, G. N. P. V. (2025). *Exploring electric vehicle consumer behavior: Impact of digital innovation, environmental concern, perceived value, and social influence on purchase intentions*. **Frontiers in Sustainable Cities**, 7, 1-10.
- Botta, A., Mohini, P. V., Nooka Raju, A., & Balaji, C. (2024). *Deep learning for sentiment analysis in financial markets*. In **Proceedings of the 5th International Conference on Recent Trends in Computer Science and Technology (ICRTCST 2024)** (pp. 233–238).
- Balaji, C., Yaswanth, P. V., Koushik, T. N., Yashika Prabha, K., & Ramachandran, M. (2024). *Enhancement of accuracy measure by detecting clinical notes using support vector machine*. **Lecture Notes in Networks and Systems**, 1169, 300–305.
- Balaji Ch, Shankar Ch, Ramulu Bhukya, Raja Babu P, Khudsiya Zeeshan, & Sahyaja Ch. (2026). Cultural dimensions of rural transformation under the Jal Jeevan Mission: An empirical assessment of household water security and quality of life in Andhra Pradesh. *Social Science Forum Journal*, 10(9), 206–213. <https://doi.org/10.10118/SSFJ/2610913>
- Tatineni, S. R., Balaji, Ch., Mobasheer, S., Asadullah Khan, M., & Kannaiah, P. (2026). Sustainable farm management practices and their impact on economic and environmental performance: Evidence from emerging economies. *Social Science Forum Journal*, 10(6), 87–104. <https://doi.org/10.10118/SSFJ/2610608>
- Sahadev, C. S. V., & Balaji, C. (2025). Impact of Share Buybacks on Stock Price Movement and Market Performance. *IUP Journal of Accounting Research & Audit Practices*, 24(3), 127-151.
- Yamarthi, S., & Balaji, C. (2024). IMPACT OF THE NEW EDUCATION POLICY 2020 ON HIGHER EDUCATION. *RESEARCH CONTEMPLATION: A MULTIDISCIPLINARY APPROACH*, 103.