

Findings Format to Examination

Notification No: F.NO. COE/ Ph.D./(Notification)/571/2024

Notification Date: 06-12-2024

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Topic of Research: Water Governance in the Slums of Delhi: A Study of Socio-economic and Political Issues of Accessibility, Availability and Affordability

Major Findings

- The findings reveal severe water insecurity in non-notified slums, where the per capita availability of water is alarmingly below national standards. Residents receive only 15–25 litres per capita per day (lpcd) of non-drinking water and 2–5 lpcd of drinking water, compared to the national benchmark of 135 lpcd. Water sources are often distant—many households walk between 100 and 500 metres to fetch water. Such limited access undermines basic health, hygiene, and dignity.
- Access to water imposes substantial financial and time burdens. Households spend Rs 100–700 per month, consuming nearly 8–9% of their income on water, and spend two to three hours daily collecting it. The process involves long queues, physical strain, and repeated trips, disproportionately affecting women and children, who bear the brunt of water collection responsibilities. This burden restricts their participation in education, employment, and social life, reinforcing gender inequalities and social exclusion.
- The study found that non-drinking water is largely untreated and contaminated, while even treated drinking water often contains visible impurities and biological pollutants. Supply is intermittent and uncertain, usually once or twice a day, with significant seasonal variation. Water shortages peak during the summer months, creating a deep sense of insecurity among slum dwellers that remain uncertain about future supply.
- Delhi's water governance system is fragmented and poorly coordinated, involving multiple overlapping institutions such as the Delhi Jal Board (DJB), Municipal Corporation of Delhi (MCD), Delhi Development Authority (DDA), and Delhi Urban Shelter Improvement Board (DUSIB). The city's hybrid administrative structure creates overlapping mandates, weak accountability, and a silo-based decision-making culture.
- Water access in the studied slums is highly unequal and politicised. Legal status of settlements, socio-economic hierarchy, and political patronage play decisive roles. Households near water mains or those connected to local leaders and political representatives often enjoy better access. The study found instances of pipeline tampering, illegal connections, and upstream water capture, depriving households at the tail end of supply lines. Complaints are typically routed through MLAs or local

intermediaries rather than formal grievance channels, indicating a politicised and clientelist water regime.

- The ecological health of Delhi's water system is deteriorating. The city's groundwater extraction rate (137%) far exceeds recharge levels, leading to overexploited and polluted aquifers. Delhi treats only about 15% of its wastewater (755 MLD of 5017 MLD generated), wasting a major potential internal water source. Similarly, despite multiple government directives, rainwater harvesting remains negligible due to poor infrastructure and enforcement.
- The human cost of water scarcity is most evident among women and children. The daily burden of collecting water leads to physical exhaustion, health risks, and loss of educational and economic opportunities. These gendered effects reveal the social dimensions of water insecurity and underscore the need to embed equity and inclusion into water governance frameworks.
- Current water planning in Delhi remains engineering-centric, focusing narrowly on infrastructure and supply-side solutions. It overlooks social, economic, and cultural factors shaping access and affordability. The study calls for a shift from a "silo approach" to a "system approach"—one that integrates the full water cycle, including sanitation, wastewater reuse, storm water management, and rainwater harvesting.