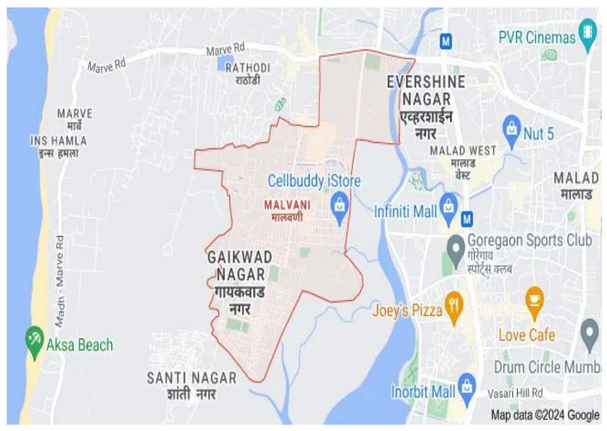
Water Diaries: Women's Experiences of Water Scarcity in Mumbai Suburbs

Neda Parvin Shaikh, PhD Researcher, CHRIST (deemed to be) University, Bengaluru, India

Introduction

- **Water Scarcity in Mumbai**: Despite receiving over 2,200 mm of annual monsoon rainfall, Mumbai faces significant water shortages due to inadequate storage and drainage systems.
- **Population Impact**: Over 60% of Mumbai's residents live in slums and chawls, yet these areas receive only a fraction of the city's daily water supply.
- **Daily Water Consumption**: Households in Mumbai's suburban areas often receive an average of 50-60 liters of water per person per day, falling short of the World Health Organization's recommended 100 liters.
- **Gendered Burden**: Women in these communities spend an average of three to four hours daily collecting water, limiting their opportunities for education and employment.
- **Health Implications**: Carrying heavy water containers over long distances leads to musculoskeletal disorders, while the stress of managing inadequate water supplies contributes to chronic anxiety and depression among women.
- **Safety Concerns**: Women face heightened risks of harassment and violence while queuing for water at public taps or negotiating with tanker operators.

This study documents the lived experiences of women navigating water scarcity in Mumbai suburbs, focusing on the chawls of Malad, Malvani, and MHADA colonies.



Methodology

Qualitative Research Design: Semi-structured interviews were conducted to explore the lived experiences of 50 women in Mumbai's suburban chawls (Malad, Malvani, MHADA), focusing on water scarcity and its gendered impacts.

Data Collection: Interviews took place in participants' homes when male family members were absent, ensuring privacy. Topics included household water availability, water collection methods, and the socio-economic impact of water scarcity.

Data Analysis: A mixed-methods approach:

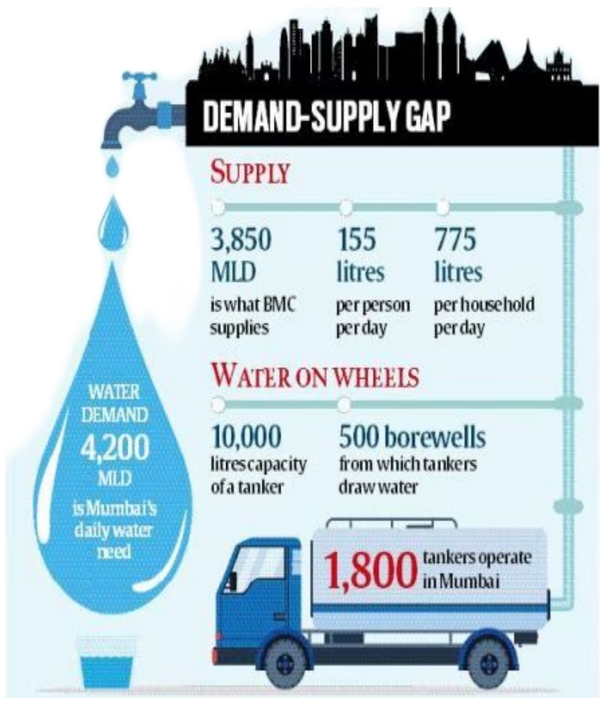
- Thematic analysis to identify recurring themes (e.g., coping mechanisms, community networks).
- Basic quantitative metrics on time spent collecting water and frequency of shortages.

Ethical Considerations:

- Informed consent obtained via signed forms.
- Confidentiality maintained by omitting identifying details.
- Secure storage of interview notes.

Challenges:

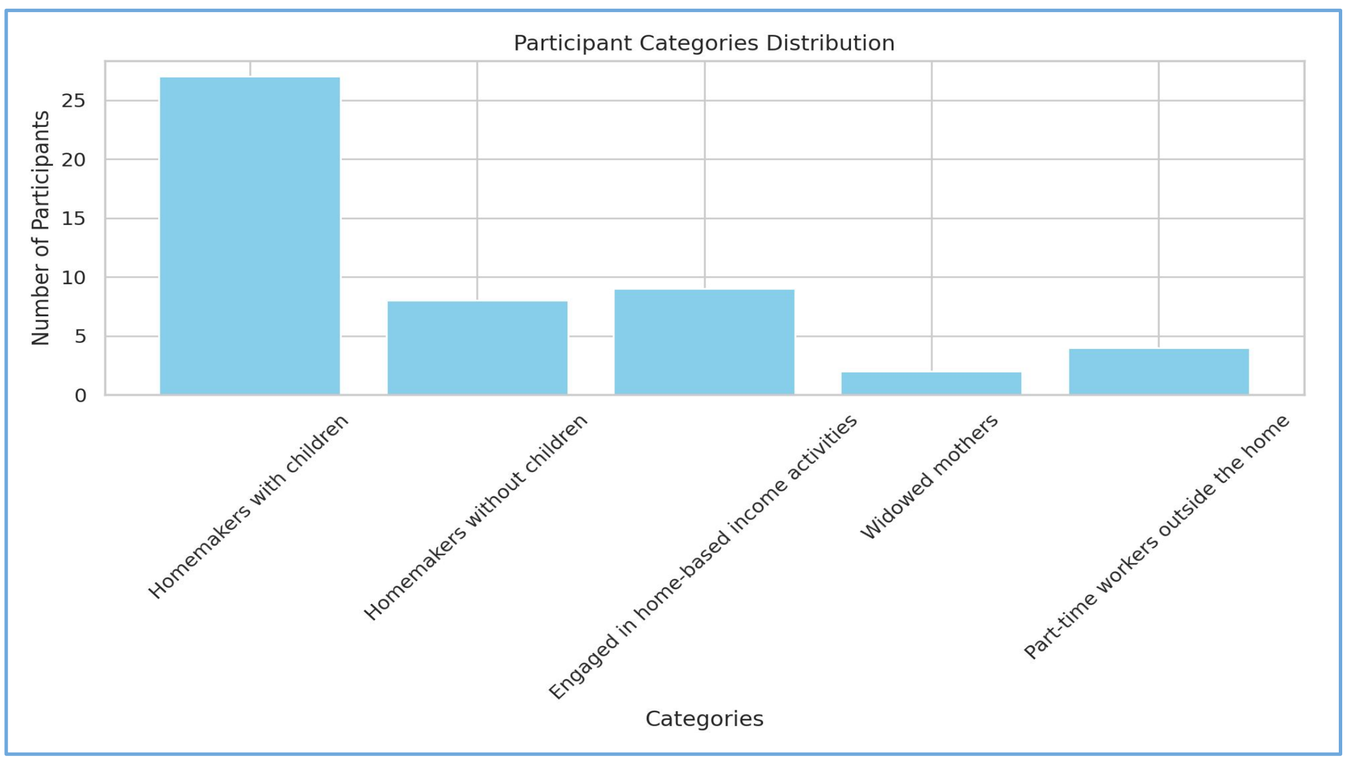
- Self-reported data may introduce biases.
- No audio recordings, relying on detailed notes.
- Findings are specific to the selected chawls in Mumbai.



"Fights over water happen almost every day. It's exhausting, but what choice do we have?" - Saima

Need for Study

- **Water Scarcity in Urban Areas:** Over half of the global population faces water scarcity. Mumbai's growing population and inadequate infrastructure make water access a significant challenge, especially in overcrowded informal settlements
- **Gendered Impacts of Water Scarcity:** Women and girls bear the primary responsibility for water collection. In Mumbai's chawls, this daily burden limits economic participation and perpetuates gender inequalities, necessitating a deeper understanding of these gendered experiences.
- **Underutilization of Oral Histories:** Oral histories and qualitative methods are underutilized in water research, limiting the understanding of how water insecurity intersects with gender, migration, and urban infrastructure.
- **Mumbai's Chawls as a Case Study:** The chawls, a symbol of Mumbai's housing crisis, have deteriorated due to neglect, causing overcrowding and poor living conditions. They require more focused research.
- **Research Gaps in Women's Lived Experiences:** While gendered impacts of water scarcity are acknowledged, studies focusing on women's specific experiences in Mumbai's chawls are scarce, especially those employing oral histories to capture their challenges and coping strategies.



Results & Findings

1. **The Labor of Water Collection**
   - Women spend 4–5 hours daily managing water collection.
   - Water supply is unpredictable, often starting as early as 4:00 AM.
   - Water motors are shared among 25 households, requiring coordination in small groups (5–8 homes at a time) to ensure fair distribution.
   - Frequent conflicts occur over water access, sometimes leading to physical altercations.
2. **Emotional and Psychological Impact**
   - Constant anxiety over water availability disrupts sleep patterns.
   - Women often sacrifice personal hygiene to prioritize household needs.
   - The emotional burden leads to chronic stress and fatigue.
3. **Coping Mechanisms**
   - Water-sharing agreements among neighbors help mitigate shortages.
   - Women negotiate with municipal authorities and pool funds to buy water from private tankers when needed.
   - Community collaboration fosters resilience despite systemic challenges.
4. **Systemic Inequities**
   - Water management is seen as "women's work", reinforcing gender inequalities.
   - Limited male involvement in water collection impacts women's ability to engage in paid employment.
   - Governance failures exacerbate the crisis, with no long-term solutions for improving infrastructure.

Discussion

🔹 **Gendered Water Insecurity**

- Women in urban informal settlements bear the brunt of water collection.
- Water-related labor leads to physical strain, health risks, and mental stress.

🔹 **Intersectionality: Gender, Class & Urbanization**

- Water scarcity disproportionately affects women from lower-income backgrounds.
- Communal water-sharing leads to conflicts but reinforces traditional gender roles.

🔹 **Community Resilience & Informal Networks**

- Women coordinate motor activations to manage water pressure.
- Informal sharing agreements ensure water access but perpetuate unpaid labor.

🔹 **WASH Governance & Policy Implications**

- Gender-sensitive water policies are crucial for equitable access.
- Women's participation in water governance can lead to more sustainable solutions.

🔹 **Broader Lessons for the Global South**

- Addressing urban water scarcity requires an intersectional and holistic approach.
- Policies must integrate gender, class, and infrastructure challenges for long-term resilience.

Conclusion

📌 **Women's Water Burden**

- Women spend 4–5 hours daily on water-related tasks.
- Early morning water collection causes physical exhaustion & health issues.
- Unpredictable supply increases stress & anxiety.

📌 **Systemic Gender Inequities**

- Women's unpaid labor in water collection reinforces gender disparities.
- Limited involvement in decision-making excludes them from WASH policies.

📌 **Call for Policy Change**

✅ Gender-sensitive urban water policies – Recognizing women's labor in water collection.

✅ Infrastructure investment – Reliable, sufficient water supply in informal settlements.

✅ Capacity-building programs – Training women for participation in local water governance.

✅ Participatory monitoring systems – Using oral histories & qualitative data for better governance.

📢 **Call to Action**: Involving women in policy & infrastructure decisions ensures equitable, climate-resilient solutions for sustainable water governance

"Men think dealing with water is our job. They don't realize how hard it is." - Priya