DELHI RISING

GREENPEACE
ग्रीनपीस

Water Access Audit

Gaps, Costs and Beyond

Water Access Audit

Gaps, Costs and Beyond

Ground Report by Greenpeace India

August 2025

Published by:
Greenpeace India Society
#142, Ground floor, 2nd Main, 2nd Cross, Domlur 2nd Stage,
Bangalore- 560038, India.

Research Team
Ankit Rana, Gauri Sharma, Hemant, Tripti Singh

Author
Vaishali Upadhyay

Editor
Nischita Verrendra

This study is part of the Delhi Rising campaign by
Greenpeace India, and Youth For Climate Justice.

Designed by

wobbly table
www.wobblytable.in

CONTENT

KEY HIGHLIGHTS

- The survey has covered 500 households in 12 informal settlements and bastis of Delhi.

- The survey reveals 34% of households buy water from private suppliers, 29% depend on water tankers, 21% use water ATMs, 14% have Underground water tanks (submersible connection) and 2% depend on their neighbourhoods.

- 34% of households are spending up to 15% of their monthly income to buy water and their monthly income falls between ₹6,000 to ₹10,000.

- Although the Delhi government in its recent announcement promised to install 3000 water ATMs in April, between April to June only 20 water ATMs have been installed in public spaces. Despite the announcement in the 2025 Heat Action Plan regarding the installation of water ATMs, no new water ATMs have been set up in the surveyed informal settlements. The few existing water ATMs are limited in number and fail to provide the promised 20 litres of free water.

- 29% of households depend on water tankers which come only once or twice a week. However, in most low-income households which lack large storage sumps, this frequency falls short.

- There is a huge gap in need and availability of water, and this gap is being filled by purchasing water at steep prices. The data highlights that on an average, 37% of these households reported that they need at least 20-25 litres of water per day, considering the size of their families and consumption patterns. Of these households, only 28% receive adequate water.

- Four of the surveyed settlements had Water ATMs, and in these areas, 67% of respondents said that it made water sourcing more accessible and convenient.

- Around 80% of respondents experienced some level of water shortages - frequently or occasionally.

- 39% of households said they find their water clean, mainly because they buy it from private suppliers

- 37% of the respondents said they had either missed days or hours of work because they were waiting in long queues to collect water.

- 70% of respondents revealed that their monthly essentials budget was impacted by the rise in water prices.

- The report reveals that there are significant gaps between what the policy documents say and the reality on the ground.

SUMMARY

This report aims to highlight the water availability gap during peak summer months, by assessing the water consumption pattern of residents, particularly those living in informal settlements (or *Bastis*) in Delhi. A significant portion of Delhi's households, around 18%, do not have the piped water supply. The city's water woes are exacerbated during summer months thanks to short supply, groundwater degradation and inaccessibility in slums and informal settlements. The situation is worsening every year due to climate change, inefficient water infrastructure and unequal distribution of resources.

To better understand this situation, a rapid survey of 500 households was carried out across 12 informal settlements in Delhi. These areas were selected based on the presence or absence of water Kiosks (also known as water ATMs) , a government-installed system that allows residents to access water, with a daily free limit of 20 litres per household. One of the key objectives of the survey was to assess whether this 20 litre free water allowance is sufficient to meet the daily needs of families living in these settlements, especially during heatwaves.

The findings reveal that many residents in these areas are facing extreme difficulty in accessing drinking water. Most of them heavily rely on private water suppliers, which adds a significant financial burden on their families. On an average, households are spending up to 15% of their monthly incomes, falling in the range of ₹6,000 to ₹10,000, to purchase water. This situation is particularly harsh for families with no access to water ATMs, where reliance on expensive and often unreliable private suppliers is even greater. The findings also reveal that lack of adequate and reliable sources of water leads to tensions among residents, often affecting interpersonal relationships, missed work days and impact on overall living conditions.

Although access to affordable and clean water is much better in areas with functioning water ATMs, highlighting the importance of such easy access infrastructure, it was also

found that, contrary to promises made by the government, these ATMs are not free everywhere.

This report intends to support policymakers and government authorities in understanding the gravity of the water crisis in informal settlements. By shedding light on these inequalities and the financial strain on low-income households, the report emphasizes on the need for more inclusive, targeted, and sustainable water distribution strategies, especially in the face of rising temperatures and frequent heat waves.

INTRODUCTION

In the 21st century, distribution of critical resources like water, continues to remain highly inequitable in our country. Out of 1.4 billion people, 35 million people do not have access to safe drinking water. Delhi is no different when it comes to water supply infrastructure and accessibility. The national capital has three main water sources: raw water from Haryana, Ganga water supply and ground water. Around 18% of Delhi households do not have piped water supply and heavily rely on tube wells, hand pumps, canals, and private water tanks during peak heat months. Every year Delhi's temperature rises, setting new records, gravely affecting lives and livelihoods. According to a 2025 article published by The Economics Times, last year 2.7 million registered consumers with the Delhi Jal Board faced challenges with water quality and supply during the summer. While these are registered complaints, several unregistered others continue to face this reality in silent frustration with few redressal options. To address this growing problem, the government has included the installation of 3000 water coolers in the Heat action plan 2025. According to the heat action plan, the Delhi Jal Board will ensure the availability of drinking water at various public locations including residential, commercial, and industrial areas, by setting up 'Piaus' (free water distribution points). Although the plan was announced in April, most steps are yet to be implemented.

The report aims to understand how the government's plan to install 3000 water ATMs will help bridge the gap for the residents of Delhi, especially those living in informal settlements. This study highlights the needs of the people, particularly during peak summer, and how much water they have at their disposal to get through the challenging months. It also highlights the ways in which they try to cope without systemic support.

The first part of the report explains the approach used to carry out the study. The second part presents the findings from the survey conducted in Delhi's informal settlements. The third part includes a discussion and analysis of the results. And finally, the fourth part covers recommendations and possible ways forward to address the issues effectively.

STUDY APPROACH

This quantitative study aims to investigate the water availability gap and subsequent challenges faced by residents living in informal settlements, *bastis* and slums of Delhi. Most respondents in this study are construction workers, street vendors, daily wage labourer, domestic workers, homemakers and a few others deeply impacted by the worsening extreme weather conditions.

Participants Demography

The study involved a total of 500 households from 12 informal settlements across Delhi. Participants ranged in age from 18 to over 60 years, and included both men and women, along with children living in the households. The average household size had 5 to 7 members, with some households having as many as 10 to 12 members. Most participants reported their monthly household incomes between ₹6,000 and ₹10,000. The primary occupations of most people were daily wage labour, construction work, homemakers, and street vending highlighting the economic vulnerability of the surveyed population.

Geographic Coverage

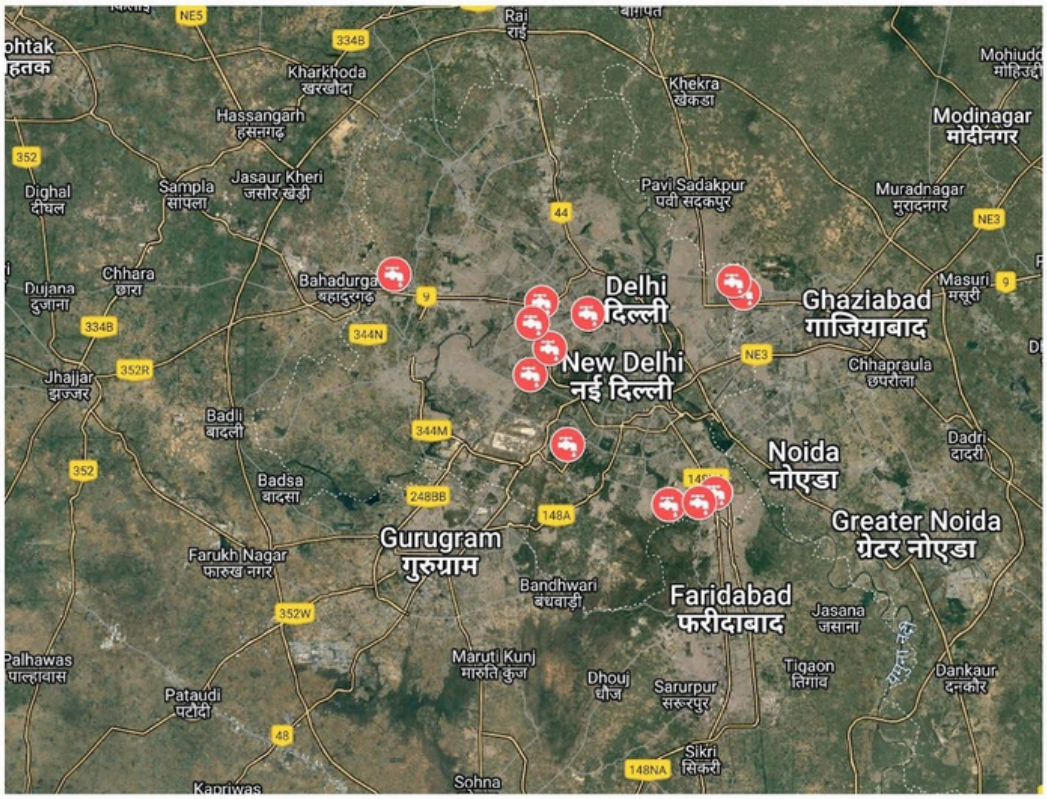
Survey locations were chosen based on the presence or absence of water ATMs in the vicinity, to allow effective comparison of data. The names of the settlements are: Sakurpur Basti, Savda Ghevra, Daya Basti, Chunna Bhatti, Khajan Basti, BIW Colony, Seemapuri, Sunder Nagri, Lohar Basti, Sangam Vihar (waste pickers basti), Raghubir Nagar JJ colony and Kusumpur Pahari. Out of these settlements only Savda Ghevra, Sakurpur basti, Khajan basti, Chunna bhati(Kirti Nagar) have functional Water ATMs.

Water Audit Survey Location

Survey locations

- Savda Gevra
- Sakurpur Basti Water ATM
- Khajan Basti
- Chunna bhatti kirti nagar
- Seemapuri
- Sunder Nagri Basti
- Kusumpur pahadi
- Raghubir nagar JJ colony
- Sangam vihar waste picker Basti
- Daya basti
- BIW colony
- Lohar basti, Lal kua khua mod

To understand the water situation during the heatwave period 12 informal settlement have been survey.



Data Collection Method

A structured questionnaire was used to collect data efficiently. Additionally, observations were made during visits to better understand the challenges faced by residents and to assess the availability and condition of water supply infrastructure.

Ethical Consideration

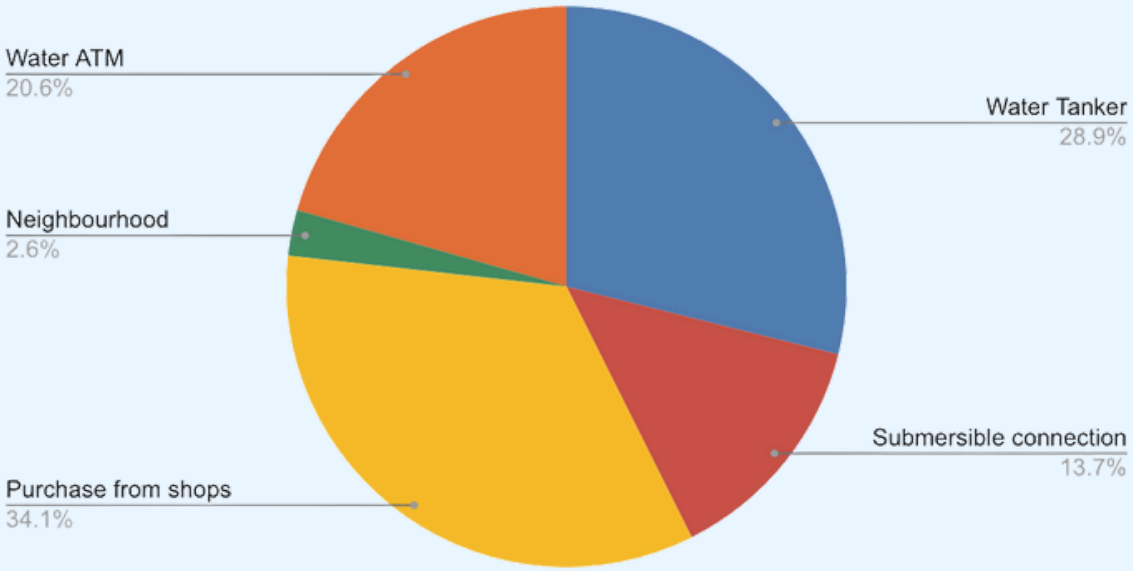
All participants were informed about the purpose of the study, and informed consent was obtained before conducting the survey.

RESULT & ANALYSIS

This section displays the key findings from the Rapid Water Audit that surveyed 500 households across 12 locations in Delhi. These findings not only highlight gaps in public water services but also help strengthen community narratives by providing evidence of lived experiences. They fill a critical data gap regarding water access in informal settlements and can support more grounded advocacy and policy action.

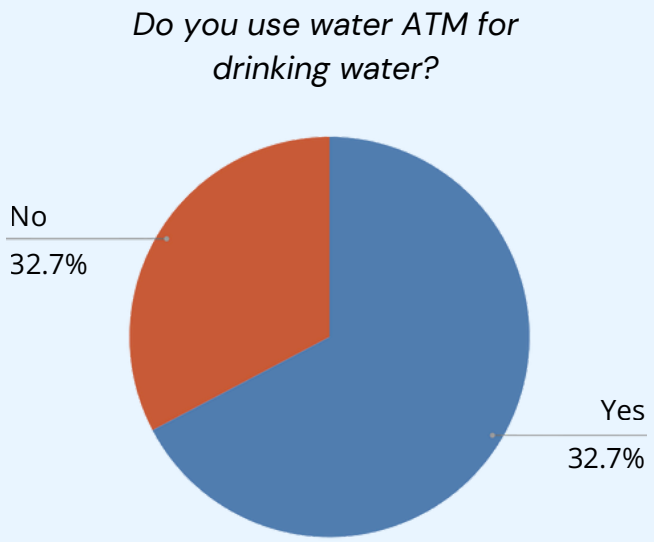
What is the source of water in these settlements?

Where does the drinking water come from in your household?



Most surveyed households rely on external sources of drinking water. According to our survey 34% of people buy drinking water from private suppliers (purchased from shops), 29% depend on water tankers, 21% use water ATMs (only where they were installed), 14% use underground water tanks (submersible connections) 2% borrow water from neighbours. This shows that a large number of families are still not connected to a

reliable public water supply system. Due to inadequacy of the water supply infrastructure, these households have developed their own coping mechanisms to secure water. However, these mechanisms are expensive and unsustainable.. These households struggle to get water, a reality at odds with their basic right to water as stipulated under Article 21 of the constitution. All these sources are irregular, unreliable and escalate the level of effort needed to access a basic resource like water. This is also symptomatic of the systemic exclusion of those living in informal settlements.



Water ATMs are installed only in a few surveyed locations - Savda Ghevra, Sakarpur Basti, and Khajan Basti and Chunna bhati. But even in these areas, **the promised 20 litres of free water is not being provided**. **These water ATMs were installed by NGOs or private companies** while the water supply comes from the Delhi Jal Board. Also, the water ATMs do not operate around the clock, and stop working when there is a power outage, making it unsustainable.

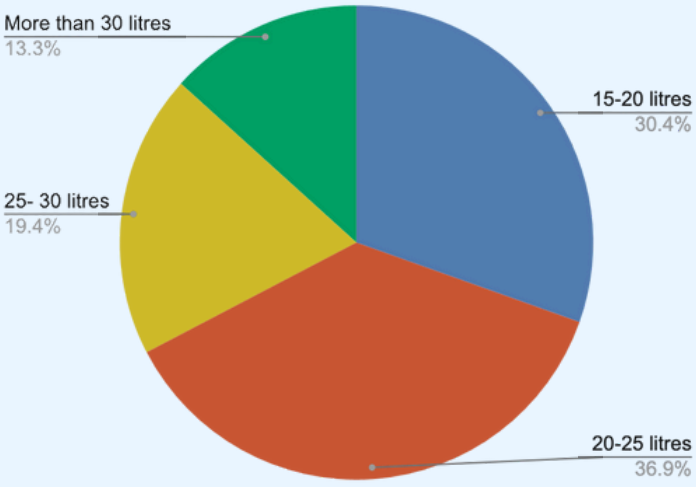
In fact, **37% of the respondents** said that the water ATMs often do not work properly. **While the Heat Action Plan mentioned new installations**, not a single new water ATM has been set up in the surveyed localities. Only 20 new water ATMs have been installed in public spaces across Delhi, as opposed to the promised 3000. In surveyed residential areas, the ones that do exist are quite old and have not been set up by the government, limiting accessibility and affordability for many. Many families also said that they do not have access to these ATMs because they are located too far from their homes.

Dependence on Government Water Tankers

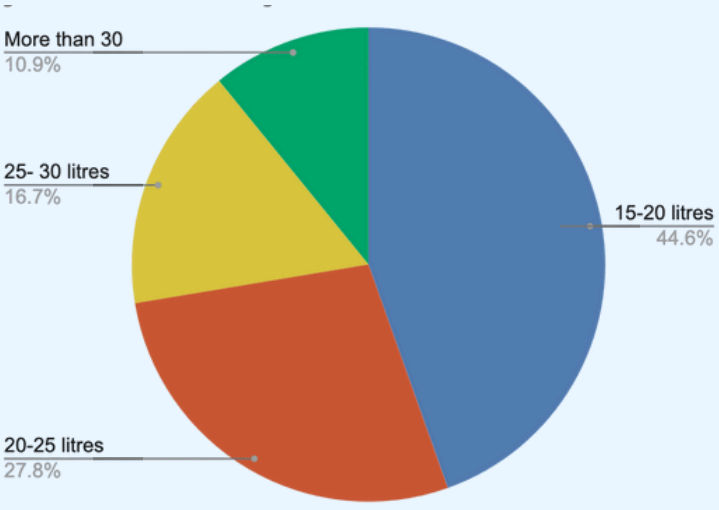
The data shows that **29% of the households, which is the second-largest share, depend on water tankers.** However, households complained about the poor quality of this water. In some areas, tankers come only once a week or once in two weeks, which forces residents to depend on other private suppliers, further increasing the financial burden. Residents are forced to frequently visit the Jal Board office to request water tankers for their localities. A few families revealed that they have had to sometimes offer money to ensure water tankers come to their locality twice a week. Most low-income households do not have enough tanks, space or utensils to store water for future use. Hence, once the tanker leaves and their meagre accumulated water is spent, they are forced to approach private suppliers for their needs.

Water Requirement and Availability

On an average, how many litres of drinking water does your household need daily?



Currently how many litres of drinking water does your household receive or use daily?

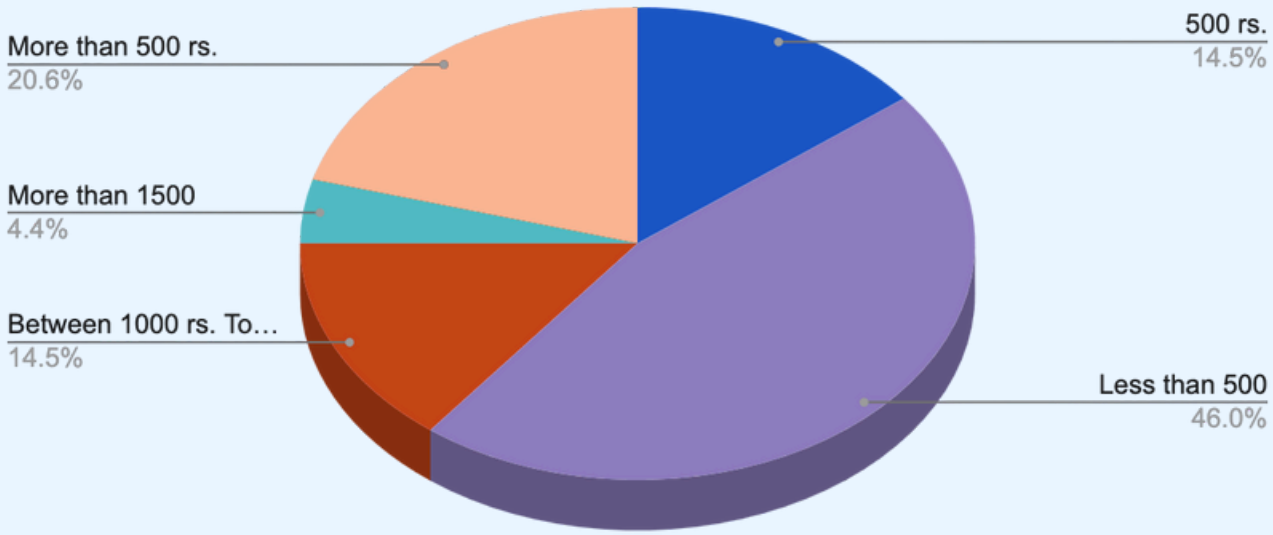


The data shows a clear gap between the demand for water and its availability. The study highlights that on average, 37% of surveyed households need at least 20-25 litres of water per day, considering the size of their families and consumption pattern. However, of these households, only 37% receive 20-25 litres of water. Please note that in these locations, there is no regular water facility available. People only receive the 20 litres of water they need because they are paying for it. This situation reflects what we refer to as an **acute water shortage**.

This water deficit forces many families to use or spend extra money to purchase additional water, further increasing their financial burden and affecting their overall well-being.

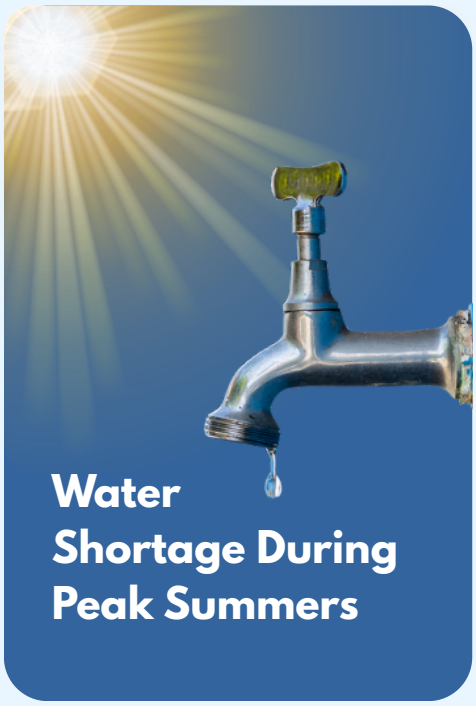
Additional Financial Burden on low-income households:

How much do you pay for drinking water per month?



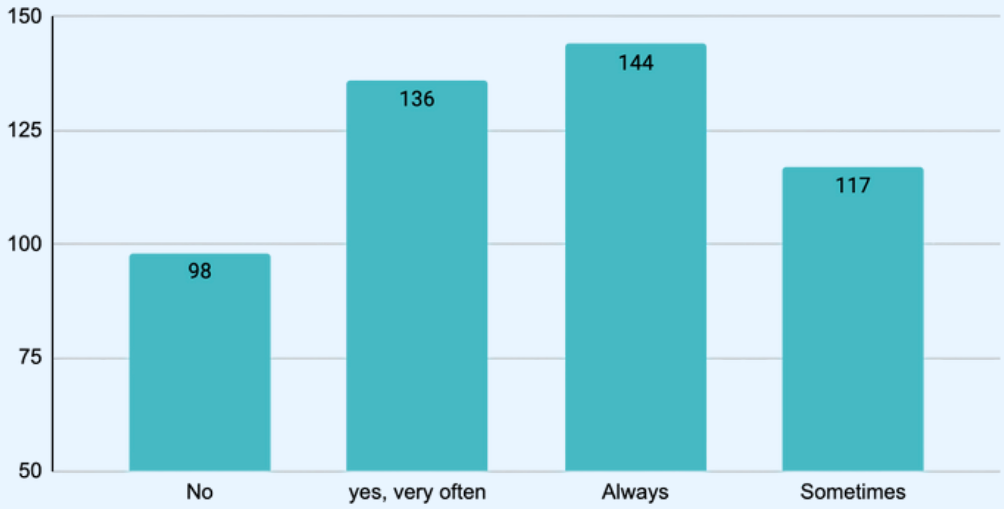
As the data highlights, most of the households end up purchasing water as there is no other source available, and if it is available, it is largely inaccessible and unreliable. Many households have responded that they spend between 500 to 1500 rupees per month on drinking water, with average monthly incomes ranging between 6000 and 10000 rupees. This means families are spending a whopping 15% of their income just to access clean drinking water. In some areas, households also have to buy water for cooking,

bathing, and cleaning, which further increases their monthly expenditure. Families that do not have access to piped or community tap water end up spending significantly more than others.



Water Shortage During Peak Summers

Do you experience water shortage in your area and if yes, then how often do you experience it?



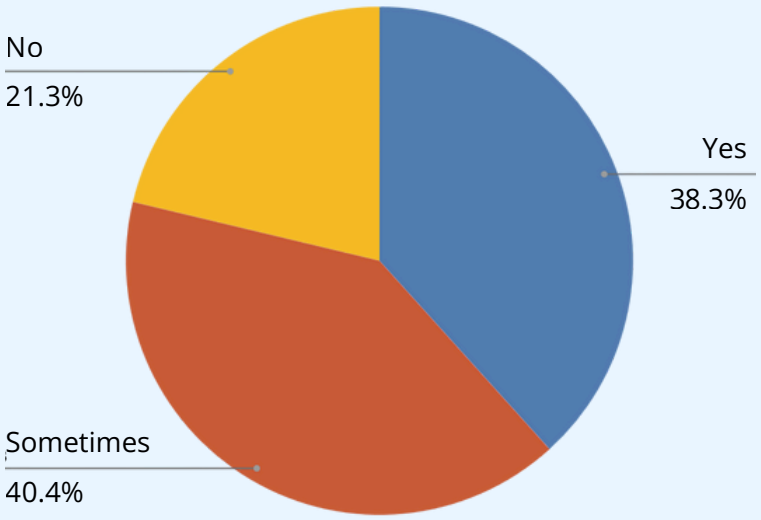
Around 80% of respondents experience some level of water shortage, whether frequently or occasionally, especially between the months of March and July. The situation is worse because during this period of time, the body naturally needs more water, but there is neither a regular nor reliable supply of water for the majority of the surveyed households. Additionally, the summer season forces them to spend more, putting financial pressure on other essential needs like food, education, and healthcare.

Water Quality and Safety

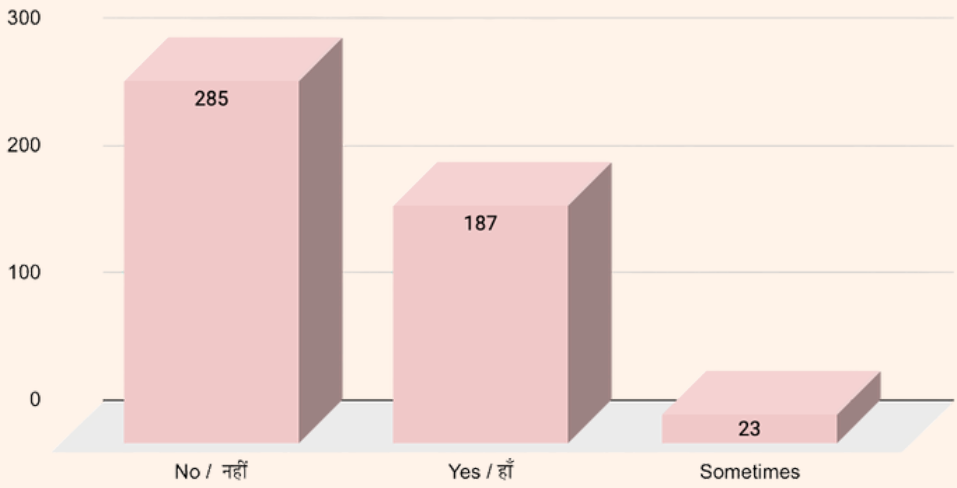
39% of households said they get clean water, mainly because they buy it from private suppliers, whereas 41% of the households said sometimes that they sometimes get unclean water. On the other hand, 22% of respondents said their water is never clean, with some going as far as to say that the drinking water supplied to them smells unpleasant, forcing them to use it for bathing or washing needs. Those who do not have the option to buy water are left with no choice but to use this poor-quality water.


पानी
ने योग्य है
HORN
LEASE

Are you getting clean drinking water?



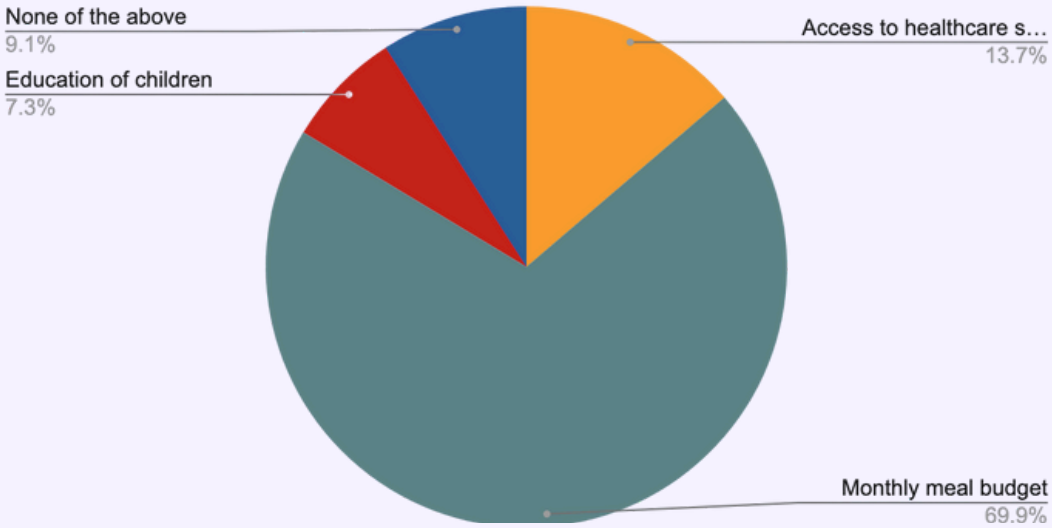
Have you ever missed a day of work because you had to wait in a long queue to collect water?



Nearly 38% of the respondents said they had either missed work or arrived late because they were waiting in long queues to collect water. These long waiting hours affect not only their jobs but also children's education and household responsibilities. The data establishes how water insecurity directly disrupts livelihoods and productivity, especially in low-income households where they earn by the day. These long waiting queues represent a significant loss of time and opportunity, particularly for women and informal workers who have little to no social protection or paid leave. These individuals and households not only bear the invisible cost of poor water quality but also the cost of missed work, reduced income and opportunities and increased household stress.

Rising water expenditure is costing people groceries, health and education:

Do you think the monthly cost of water has affected:
a. monthly grocery budget
b. education of children
c. access to healthcare services



70% of respondents revealed that they have experienced a direct impact on their monthly grocery budget due to rise in water prices. It shows that for a majority of these households, water causes inflated expenses that forces them to trade off other essential necessities. For 14% of respondents, this trade off affects their ability to afford healthcare services which can have serious consequences. 8% of the respondents said it affected their children's education.

RECOMMENDATIONS

- The Delhi government must revise its current plan and install **at least 5000 water ATMs, instead of the proposed 3000, and accelerate installations** across public, residential, and commercial areas. Special priority should be given to **informal settlements**, ensuring water is free and available to all residents.

- **By 2026, before the next heatwave**, the government should finish installing 3000 water ATMs as stated in the Heat Action Plan 2025.

- In residential areas, **no restrictions should be placed on the quantity of water**, and **the water ATMs must be functional 24x7**.

- The water ATMs should also be installed in ***labour chowks*, construction sites, markets, bus stands, and parks** to ensure wide accessibility.

- The Delhi government should direct **all establishments, factories, construction sites, shops, government buildings, industries and companies** to ensure adequate clean drinking water availability at the workplace.

- The government should declare **all malls, petrol stations as water access points.**

- The Delhi government must **repair the existing '*pyaus*' (public water Points)** and restore water supply to them.

- Till the water ATMs are fully installed, **the Delhi Jal Board should ensure a regular supply of clean and safe drinking water in all these settlements**. They should also **monitor and prevent any form of corruption** among suppliers at the water delivery points.

- The water tankers should do trips at least twice a day, in the morning and evening to ensure that those unable to collect water have access later in the day.

- In the long term, the government must invest in **comprehensive water infrastructure** within informal settlements to ensure sustainable and equitable access for all residents of Delhi.

GREENPEACE
ग्रीनपीस

Greenpeace India is an independent campaigning organization that acts to change attitudes and behaviour, to protect and conserve the environment and to promote peace.

YOUTH FOR CLIMATE JUSTICE
South Asia

Youth for Climate Justice-South Asia is working on the intersection of climate change and youth actions in South Asia. The objective is to work on climate change issues through youth actions and create youth climate networks across South Asia.

Greenpeace India Society
#142 Ground floor , 2nd Main, 2nd Cross,
Domlur 2nd stage, Bangalore 560038

Supporter Services:
supporter.services.in@greenpeace.org

www.greenpeace.org/india