PUBLIC TOILET DESIGN IN INDIA

Insights for Designers, Public Officials, and Academics
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FOREWORD

This document contains insights for public sanitation in urban areas. The insights were derived from four weeks of research, user interviews, and prototyping conducted in and around Trivandrum and Bangalore, India. Interviews were conducted for well over 100 people, more than half women. The interviewees ranged from those who would never use any public toilet to frequent users of public toilets. Also taken into account are interviews with cleaning and service staff, government officials, and sanitation experts. We believe that many of these points are relevant far beyond Trivandrum, Bangalore, and even India, and they should be used as initial points to be considered in future public toilet designs. These insights are shared with the public in the hopes of supporting more thoughtful, useful, and effective designs for sanitation solutions in India and around the world. Let’s keep learning together.
A NOTE ON TERMINOLOGY:

PUBLIC TOILETS VS. COMMUNITY TOILETS

Public toilets are those placed in public spaces, especially near parks, bus stations, train stations, tourist attractions, and markets. Public toilet users are generally people passing through the area, and are not necessarily people who live nearby. The people who use public toilets may or may not have a toilet in their own home.

In contrast, community toilets are created for more residential neighborhoods, to be used as the main toilet facility for families that do not have their own toilet. While technically “public,” community toilets will have a lower number of unique users, but a higher number of return users. The needs of those users and their attitudes towards the toilet may also differ from those of public toilet users.

Although insights may still be relevant to the design of community toilets, the stories and insights collected here are specifically around public toilets, and will be most helpful in that context.

A public urinal only toilet near the Trivandrum Zoo.
INSIGHT 1

Empower Individuals Via Public Toilets

Good public toilets enable individuals to leave their homes.
INSIGHT 1

“Because of this toilet, I can go to the park in the mornings without worrying about having to use the toilet.”

- Shailaja, Bangalore

Women and the elderly are underrepresented in the public sphere, partly due to the fact that they limit their movements based on access to acceptable toilet facilities.

People develop habits and routines that accommodate their toilet needs within the context of the available infrastructure. New public toilets that provide acceptable levels of sanitation away from home enable people, especially women and the elderly, to make new routines that are not as geographically restricted. However, because individuals have already developed these workarounds, the true effect of having more public toilets will likely take time to manifest.

RECOMMENDATIONS:

» Recognize that the empowering effects of creating new public toilets will not be immediately apparent.
» Make efforts to reach out to women and the elderly to create awareness for new public toilet offerings.
» Reach out to children and young adults so that they do not develop the same constrained habits as their predecessors.

A local woman from Chathanoor talks about how a good toilet near her shop means that she can work longer hours.
Cleanliness is the defining quality of any toilet experience.
INSIGHT 2

“I know that I shouldn’t go to the toilets on this corner or near the bus stand, but the toilet near the shops is ok.”

–Vrnda, Trivandrum

The feeling of cleanliness is not strictly related to the presence of dirt. Discoloration, rust, or bad smells all detract from the feeling of cleanliness and the overall user experience. For women especially, cleanliness in and around a toilet makes the area feel safe because it connotes care and attention. Users (especially women) will remember where clean toilets are in order to use them in the future, and likewise, will make note of unclean toilets to avoid in the future.

RECOMMENDATIONS:

» Use construction materials that are easily cleaned and resist discoloration.
» Avoid creating horizontal ledges on the inside of the toilet where residue can build up.
» Make sure the toilet has adequate ventilation to allow odors to escape, and to prevent the growth of mold and bacteria.
INSIGHT 3

Plan for Maintenance

Without proper maintenance, toilets will become dirty very quickly.
INSIGHT 3

“These public toilets used to be nice. Now nobody takes care of them. They stink.”

-Ashwath, Bangalore

Across the board, people expect public toilets to be dirty, and many people (especially women) avoid all public toilets for this reason.

Regardless of the initial design, a poorly maintained toilet will become stinky, dirty, and potentially dangerous. The thoughtful implementation of toilet maintenance is just as important to the long-term use of a toilet as is the initial object. The notion that public toilets are dirty is also ingrained in toilet cleaners, and without specific instructions/incentives, they may not hold public toilets to high standards of cleanliness. In addition, “clean” is a very subjective quality, so visuals of the expected cleaning standards could be helpful for the cleaning staff.

RECOMMENDATIONS:

- When designing a toilet, keep in mind how often it will have to be cleaned, how it will be cleaned, and who will clean it. Design to make this task easier.
- Make sure there is a clear cleaning contract in place that explicitly defines standards of cleanliness.
- There should be a clear source of funding to pay for the ongoing maintenance of the toilet.
- Cleaners should be equipped with proper tools (soap, rags, scrub brushes, mops, etc) to do their jobs well.
- Regularly monitor the toilets to make sure that the cleaners are doing an adequate job and that the toilets stay clean between cleanings.
Set Expectations Around Reliability

Reliability drives routine.
INSIGHT 4

“The toilet near my shop never has water. You go in, and people have used it but can’t flush. It’s very dirty. I now walk several blocks more when I have to use the toilet.”

-Anand, Chathanoor

In order for a user to return to a public toilet on a regular basis, they must know that it will be open and working when they need it.

RECOMMENDATIONS:

» Clearly post hours of operation so that users can plan accordingly.
» In areas where water/electricity supply are intermittent, create backup systems to keep toilets working.
» Put systems in place so that people can report broken toilets.
» Reliability includes reliable cleanliness. Make sure that cleaning schedules are consistent.
A well placed public toilet must balance competing needs for visibility, privacy, and safety.
INSIGHT 5

“These toilets are safe because there are lots of people around, even at night.”
-Twelve-year-old girl, Bangalore

“We would never use the public toilet across the street because it is too close to the road and everyone can see us go in.”
-Two women, Trivandrum

A location that is too public will deter shy users, especially women. However, a location that is too secluded will reduce toilet visibility and create safety concerns.

RECOMMENDATIONS:

» Place toilets in areas where there are many people around, but where the toilet entrance is not within a direct line of sight from the street.
» Pick locations that allow for strategically placed walls, shrubbery, or other barriers to help a public place to feel more private.
» Place toilets in areas that are well lit, or provide lighting on the outside of the toilet.

Public toilets in Trivandrum that are visible from the road, and are aided in providing privacy by the surrounding trees.
The people who live and work around a public toilet play a crucial role in directing users toward it or away from it.
INSIGHT 6

“We call when the toilet doesn’t work. A lot of tourists come here and we want them to have a good place to go.”
-Vinesh, Taxi Driver, Kovalam Beach

“We don’t like this public toilet here. It’s too expensive and gives a foul smell.”
-Newspaper stand owner, Chathanoor

RECOMMENDATIONS:

» Whenever possible, consult local homes and businesses before installing a new toilet in order to address concerns.
» Help local people to see the value of having a public toilet near them (good for their customers, keeps the neighborhood clean, etc) so that they will become more likely to direct strangers towards the toilet and to report vandalism or cleanliness concerns.
» Give local people a stake in the toilet’s use and operation by hiring local people to help build the toilet and to maintain it once built.
Women greatly prefer single-sex toilets, but may still use a unisex toilet if it is clearly labeled as being for both men and women.
"Of course I don’t use this toilet. It’s for men!"

-Nadeera, Trivandrum, outside a poorly labeled unisex toilet

The unfortunate default seems to be that public spaces feel like men’s spaces, and women entering them are often subject to harassment. By specifically designating a space as being exclusively for women, or for both men and women, clear labeling can help make a toilet more inviting to women.

Even more, while the intentions are good, single-stall female-only toilets (with no male toilets around) often get used by men, causing women to avoid them. Therefore, whenever possible, having separate toilets for men and women is the best solution.

RECOMMENDATIONS:

» Whenever possible, have separate toilets for men and women.
» When a unisex toilet is necessary, make sure signs specifically show a female as well as a male icon, and have both “Ladies” and “Gents” written on the toilet in local language.

A well labeled Ladies bathroom in the Trivandrum airport.
Having a private space upon entering and exiting the toilet is important to help women feel comfortable using the facility.
INSIGHT 8

“I wouldn’t use this toilet, too many people would be watching.”

-Nadeera, Trivandrum, outside a poorly labeled unisex toilet

Privacy is generally most important when exiting the toilet, as women need a place to adjust their clothing before entering back into the public eye. People prefer for this space to be outside of the toilet facility because the inside is considered dirty. Privacy is also important upon entering the toilet as women don’t want to be seen entering or waiting the toilet. Having a safe place to wait outside the toilet influences a woman’s decision to use the toilet.

RECOMMENDATIONS:

» Create protected/private spaces outside of the toilet stall where users can adjust their clothing or wait for the toilet to become available.

» If the protected space is not inside the building, make sure that any walls/barriers are tall enough to cover from a woman’s ankles to the top of her head (roughly 170cm tall).
Because the toilet area is expected to be dirty, toilet users do not want to wash their hands until they are safely away from the toilet.

Better Position the Sink and Mirrors
INSIGHT 9

“I wouldn’t want the sink to be inside the building. It’s dirty inside so there’s no point in washing my hands there.”

-Anjaly, Trivandrum

The bathroom area is dirty, and users want to leave that area before washing their hands.

RECOMMENDATIONS:

» Place the sink and any mirrors outside the toilet area, either in a separate room or on the outside of the building.
Most Indian women dispose of sanitary products by flushing them down the toilet.
INSIGHT 10

“I just flush my sanitary products down the toilet. I wouldn’t want anyone to see them.”

-Julie, Trivandrum

It is impractical to expect women to hold on to used sanitary products, and can be embarrassing to throw them outside of the toilet. If a designer wishes to deter pad flushing, they must provide alternative ways to dispose of used sanitary napkins, as well as creating signs asking women not to flush them.

RECOMMENDATIONS:

» Provide trash bins that have lids and are labeled for the disposal of feminine products.
» Include signs that ask women to dispose of feminine products in the trash and not the toilet.
Most people care more about function than innovation.
INSIGHT 11

“I don’t care how the toilet works, I just want it to be clean!”

-Ananya, Bangalore

If a design uses new technology that users may not be familiar with, make sure the emphasis is placed on its usefulness and not its technological novelty. Technology should be used only in places where it enhances functionality, not as a crutch for poor design.

RECOMMENDATIONS:

» Use simple interfaces and signs to make technology approachable.
» Be thoughtful about the value added by each piece of new technology. Implement electronic systems only when they are actually better than the mechanical or manual systems that have traditionally been used.
» For many people, technology can be intimidating, so any technology, depending on its use, should be put forward in a friendly way or hidden from view.

A service engineer checking the service panel of an electronic toilet.
Most people feel that free toilets are dirtier than paid ones, but many are still more likely to use a free toilet than a paid one.
INSIGHT 12

“We use the station’s toilet. You have to pay for the public toilet here.”

- Gas station attendants in Bangalore.

The gas station attendants in Bangalore use a dirty toilet at the gas station because it is free. When asked, they all preferred the pay-toilet located at the gas station because it is nicer and gets maintained more often.

In some areas, toilets are now locked because there was not enough money to pay for ongoing maintenance and cleaning.

RECOMMENDATIONS:

» Choose business models carefully according to your goals and financial limitations.
» Consider the economic situation of the target users: Will even a small amount deter them from using the toilet?
» Consider novel ways to address vulnerable populations at a pay-toilet. Can they be given vouchers or tokens for free toilet usage?
» Consider the economic sustainability of the toilet. Is it dependent on revenue from toilet users?
» Consider the care of the toilet. Does a nominal fee prompt more respectful behavior of the toilet?

A public bathroom in Kovalam Beach whose revenue goes towards maintenance of the toilet.
CLOSING THOUGHTS

The task of designing public toilets is a good step towards a larger goal of public sanitation and individual mobility. However, where most toilets fail is not in their initial construction, but in their continued upkeep. In the future, designs should take into account both the immediate needs of the toilet user (including space, placement, and attractiveness), as well as the long-term challenge of maintaining a toilet at a high level of functionality and cleanliness.