

NAMMA TOILET - COMMISSIONERATE OF MUNICIPAL ADMINISTRATION (CMA)

- **Background**

In the cities of Tamil Nadu, where awareness was not an issue; existing facilities were found to be insufficient and unsuitable for use by all. Problems such as unplanned spaces, selection of construction material, leaking taps, broken toilet pans, inaccessible toilets, lack of ventilation, clogged networks and insufficient water and electricity were prominent. A multidisciplinary team including sanitation experts, architects, industrial designers, branding and communication specialists and material experts was formed to look into various aspects of urban sanitation. As a result, a universal toilet design 'Namma toilet' was designed keeping in mind user needs and aspirations. Namma toilet is an initiative by the Commissionerate of Municipal Administration (CMA), Government of Tamil Nadu. It is a user-friendly toilet accessible to all type of users - men and women, children, the elderly and differently abled.

- **Location, Date**

Tamil Nadu, 2012

- **Areas**

Urban

- **Stage/Scale**

Pilot converted to full scale model

- **Objective of the assignment**

The aim of the project was to make the state open defecation free by 2015. They believe that the solution lies in mapping the areas where open defecation is still being practised, providing facilities wherever the need arises, and putting in place, a mechanism to maintain these facilities.

- **What was done**

- The Commissionerate of Municipal Administration has designed a universal toilet for the urban residents of Tamil Nadu, especially the urban poor at large. After an intensive exercise that was spread over 6-8 months, the Commissionerate has developed a universal design toilet that is truly meant for the user of the toilet. These toilets can be used by the entire population without any prejudice; they can be used by able bodied men, women and children as well as the elderly and disabled.



- The emphasis from the beginning was to provide a facility to the user that is barrier free and gives a feeling of openness without compromising on safety and security. The toilet module is pre-fabricated such that it can be easily installed onsite in the shortest time. The body of the toilet stall is a single mould without joints and the interiors are seamless – no sharp edges and corners to avoid dust accumulation and enable easy maintenance. Adequate lighting, vandal resistant fixtures and accessories and motion sensor lighting powered by solar panel are other distinguishing features of the stall. Each touch point within the toilet stall has been finalized keeping in mind the user of the toilet.



- These toilet stalls can either be standalone units or can be assembled together to form a row of toilets or even an entire toilet compound with minimum masonry work. Therefore, we intend to create a demand based deployment of these toilets; these can serve as neighbourhood toilets, family toilets, public toilets, community toilets and integrated sanitary complexes.
- Based on availability of space and need, the toilet can be erected as a standalone unit shared by a family, assembled to form a row of toilets serving a group of families or the floating population and even an entire complex for the community. The toilets are very well ventilated and give a feeling of openness, without compromising on privacy. The fitting and fixture are vandal resistant, durable and user-friendly. Each toilet stall is powered by a solar panel that is installed on the roof. During the day, the solar panels charge the battery, and when it is dark, the stalls are lit with motion sensor lighting. The first 'Namma Toilet' was built at Tambaram bus station, Chennai, which has received a very good response. In addition to the unique design of these toilets, their success has also depended on the involvement of the local municipality and toilet caretakers. The state government will build more toilets across the state as a part of its initiative to provide safe sanitation to the people.

• Impact

- Tambaram Municipality and Sri Rangam of Trichirappalli Corporation have been selected for implementation of the Universal design toilet on pilot basis. Two men toilet units, one women toilet unit, and one disabled friendly/elderly person Toilet unit have been provided with urinals in locations in Tambaram.
- More than 2500 NAMMA toilets were built across different villages in Tamil Nadu in last 5 years. This has resulted in the increase in health quotient of the local people by solving a sever issue of open defaecation.

• Challenges and Issues

In the initial days of the project, it was difficult to attract people to use NAMMA toilets. Also, the design aspects of the toilet made it slightly challenging to install the toilets at lower costs, which was one of the major concerns at that time.

• Innovation

- Namma toilets use prefabricated modular stalls which can be assembled at the site in minimal time.
- During the day, the toilets get sunlight while the solar panels charge the battery, and when it is dark, the stalls are lit with motion sensor lighting.
- Most importantly, the toilet stalls do not have sharp corners that often accumulate dust and dirt. The interiors are seamless and can be easily cleaned with the help of a water jet.
- For treating the waste water, it has been proposed to provide a range of options to suit site specific conditions. The usage of recycled flush water is also being emphasised.

• Lessons learnt

The result of the work of the team was a universal toilet, where every element was designed keeping in mind the user. It was named “Namma Toilet” to inculcate a feeling of ownership and pride in users. “Namma Toilets” are prefabricated modular stalls and can be assembled at the site within a short period. Based on local needs and availability of space, the toilet can be put up as a standalone unit shared by a family, assembled together to form a row of toilets serving a group of families or the floating population, and even an entire complex for the community.

• Financials

- During the year 2012-13, the Government has sanctioned a sum of INR 8.19 crore for construction of 333 units of well-designed differently abled user-friendly toilets in public buildings in 108 Municipalities.
- During 2012-13 a sum of INR 50.89 crores was released to the Corporations and Municipalities for the improvement of 652 existing toilets and construction of 404 new toilets with special initiatives like universal designs, e-toilets, and waterless urinals to conserve water.
- This scheme was continued during the year 2013-14 at a cost of INR 50.00 crore.

• Economic sustainability/Revenue Model

“Namma Toilets” are provided on a need-based approach after consultation with the local stakeholders. Community-based organisations are encouraged to create their own “Namma Toilets” through locally available materials. The success, however, depends on the collective effort of authorities as well as communities who will have to eventually own these toilets. These toilets won’t generate revenue on their by - products, users have to pay for it once the system is commercialized.

• Implementer Contact Persons

- **Mr. Chandrakant B. Kamble**
Commissioner, Commissionerate of Municipal Administration, Government of Tamil Nadu

• Sources and References

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