

NATIONAL BUILDING CONSTRUCTION CORPORATION (NBCC)

- **Background**

The Union Ministry of Urban Development had declared on July 30, 2015 that 480 public toilet seats will be installed at 80 different locations in Delhi under Swachh Bharat Mission. A mega city like Delhi has as big sanitation challenges. The decision to have as many as 480 toilet complexes within a very short span of time was outcome of realization of such challenges and a resolve to overcome them. The decision was taken in a meeting between the Union Ministry, Delhi Government, NBCC, the three Municipal Corporations of Delhi and Delhi Urban Shelter Improvement Board (DUSIB) and Delhi Urban Arts Commission (DUAC).

- **Location, Date**

Delhi, 2016

- **Areas**

Urban

- **Stage/Scale**

Pilot (Failed in execution)

- **Objective of the assignment**

Constructed by state-run National Building Construction Corporation, the modular toilet designed by the National Institute of Design (NID) is aimed at eliminating open defecation.

- **What was done**

- They not only decided on the target, they also decided on the designs and the processes. Various models of public toilets including the hugely popular *Namma* model being implemented in Tamil Nadu and the one developed by DUAC were discussed in details and chosen. *Namma* toilet means 'our toilet'. The *Namma* model of public toilets was conceptualized based on suggestion of Dr. A.P.J. Abdul Kalam. The modular toilet, designed by the National Institute of Design (NID), is made of high-end composite materials used in air crafts and high class rail coaches. The complexes have both English and Indian- style toilets. The *Namma* toilets have excellent other features such as:
 - Fittings being resistant to vandalism and tampering
 - Comfortable design to suit the needs of users
 - Corners and edges rounded off to prevent dirt accumulation
 - Special paintings used to prevent bacterial growth and smell
 - Ease of access to all including physically challenged
 - High natural ventilation and air draft to evacuate stale air
 - Adoption of solar energy for power needs
 - Factory built parts assembled at site for quality and modular design enabling expansion
- It was decided that the four urban local bodies of Delhi will identify 20 locations each for installing public toilet complex with six seats each. The NBCC keenly shouldered the task

to contribute a substantial part of the expenditure from its corporate social responsibility (CSR) obligation and was quickly into action.

- The toilet module is prefabricated single mould without joints and its interiors are seamless with no



sharp edges and corners to avoid dust accumulation.

- According to a press release, made to serve the convenience of physically challenged, women and men, the public toilet has also been lighting with natural light in day by a polycarbonate translucent roof sheet with metal protection to meet the requirements of sufficient power supply in the toilet all along. In order to address the issue of waste disposal, the whole system has been connected with underground sewer lines already existing at the place.
- NBCC had planned a total of 30 such Namma model public toilets in Delhi under its CSR initiative. Out of these, 21 toilets were implemented with one inaugurated on October 2, 2015 at Bhikaji Cama Place. The remaining 19 toilets at other locations of Delhi have also been inaugurated on the same day along with the one at Preet Vihar.
- With four toilet seats and urinals apiece, the complexes were constructed at a cost of INR13 lakh each by the National Buildings Construction Corporation (NBCC) Ltd. as a CSR initiative under the Swachh Bharat Mission.
- NAMMA toilets are easy to construct and are developed in such a way that natural light can be used to maximum extent. East Delhi Municipal Corporation (EDMC) Mayor Harsh Malhotra expressed gratitude to NBCC for developing these toilets and said that these are a much-needed civic amenity for the area. He said that these toilets would specially benefit those who are compelled to defecate in the open and thus become vulnerable to many diseases.

• Impact

- Twenty eco-friendly 'Namma' toilets were opened by October 2015 in the three municipal corporation areas of the national capital to prevent open defecation and promote the Swachh Bharat Mission.
- The water used for flushing is treated on-site and recycled back into the system. The toilets have a capacity to cater to 300 to 400 people per day. The result was evident in months and Delhi got futuristic toilets. Delhi is now readying itself to have more such toilet complexes.

• Challenges and Issues

The toilet complex inaugurated by the union minister in Preet Vihar had no water running in its taps, some taps were missing and the latrines were clogged. A pool of urine in front of the complex was being cleaned by one *safai karamchari*, using a broom and water from a bucket, he said, he had to bring from some distance because the water-tank has not had water for

some time. Cleaning this toilet would be almost like cleaning a dry latrine. Outside the Samaypur Badli station, another such toilet complex has taps and water absent, and urine has flown down the floor of the urinal stalls to collect in puddles.



• **Innovation**

- The complex is provided with solar panel to meet its energy.
- In order to address the issues of waste disposal, the whole system has been connected with underground sewer lines.
- The toilets are also accessible to the differently-abled.
- These toilet complexes were touted to be vandalism and tampering resistant and were said to have used special paint that prevents bacterial growth and bad odour.

• **Lessons learnt**

The modular design allows for expansion of the complex when needed. This case teaches them that no matter how well your project is, it won't succeed without proper implementation and maintenance.

• **Financials**

Each toilet complex costs INR 13 lakhs.

• **Economic sustainability/Revenue Model**

The maintenance of these toilets is ensured through participation of local stakeholders, including resident welfare associations and market associations, and the installation is looked after by NBCC.

• **Implementer Contact Persons**

- **Mr. Rajendra Wanchoo**
Chief General Manager - HRM, TRG & CSR at National Buildings Construction Corporation

• **Sources and References**

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