

# Swachh Varanasi – 'Karo kal ki taiyari'

Sanitation facilities plan and implementation support for Varanasi city

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Project brief

## Key interventions

- Facilities created and BCC program
- Measures for sustainable toilet operations
- Key experiences

### Varanasi



Varanasi is one of the oldest living c river Ganga and has 84 riverfront c sq. km under municipal corporation.	ity in the world and is know overing an area of 6.8km. It	for its cultural and re t is an urban agglomer	ligious centres. It is located on the banks of rate spread over 112 square (sq.) km with 80
Details for Varanasi c	ity as per 2011 Census of In	dia <sup>,</sup>	
Total population	1.2 million		
Slum population	0.4 million		
Floating population	~30,000 per day		
UTTAK ENADESH	المسيح مسج		
Varanasi	Sewage treatment in city		
	Total sewage generated 2		225 Million Litres per Day (MLD)
	Total installed capacity 101.1		101.8 MLD
	Actual sewage treatment 8		80-90% of the installed capacity
All	Sewer network coverage ~329		~32%
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	Cluster Name	% open defecati	on- % open defecation – Non-
		Slums	slums
	Northern Periphery	23.8%	15.7%
	Varuna	23.2%	0.0%
	Assi	39.1%	1.1%
	Western Periphery	31.3%	2.4%
	Ghats	7.7%	0.0%
	Core city	2.7%	0.0%
Varanasi ranked 418 out of 476 Class 1 cities car	iked in Swarhh Rharat Ranl	kings released in year	2015

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EY

### Key aspects of project



EY

### **Project brief**





### **Project timeline**









### Key interventions







### **Provision of facilities**













Direct beneficiaries: ~800 women and 800 men from wide variety of groups such as shopkeepers, cycle rickshaw pullers, students, teachers, tourists, boatmen, daily wage workmen.

Portable units at ghat







### **Behavior Change Communication program**



- Behavior Centered Design approach based on evolutionary psychology and ecological settings is used for the proposed interventions. It is developed by London School of Hygiene and Tropical Medicine.
- Formative research has completed and program has been designed.

### Key activities planned under BCC program

- Facilitator training
- Formation of sanitation champion group
- Visioning and ability building workshop
- Exposure visits
- Dream school session
- Cleanliness drives with VNN
- Behavior Change Curriculum for school
- Social entrepreneur incubation program
- Periodic review with sanitation champion group
- Annual celebratory event



Facilitator training through mix of classroom, art and play



### Sustainable O&M





25 October 2016



### Creating enabling environment for entrepreneurship in sanitation







### Social entrepreneur incubation program

- > 14 candidates interviewed. Finally 7 shortlisted for incubation program. 6 of them attended the program
- Detailed program outline with training modules is currently under preparation























#### Land allocation

- Formal land approval from Urban Local Body (ULB) took ~150 days
- Land allocation process with private school trust and Public Sector Undertaking (PSU) was faster and was completed in one month.

### Design

- Sizing of toilets and technology done based on space available instead of footfall
- Difference in guidelines created discrepancies and resulted in delays in approvals from donors.
- While gathering feedback from users it was understood that women want their toilets:
  - Clearly designated as women only.
  - They also prefer to have separate entrance on opposite side to gent's toilets.
  - It must also be provided with mirrors.
- Children want their toilets to be well lit and preferred brighter colours

#### **Operation model**

- User fee models succeed in public places with high footfall and sufficient space to construct 5 to 10 seats along with accommodation for caretaker. However, in dense urban areas, it may not viable to provide so much space.
- In such areas, options such as multi storey building, care-taker less toilet units with 2 or 3 seats have to explored to curb open urination/defecation through increased access to toilet.
- Advertising revenue is insufficient to meet toilet O&M expenses in areas which do not have strict hoarding policy.

#### NGO capacity

- Implementation of CSR project is done through a Not for profit organization
- NGO partner lacked sufficient skills to implement construction of civil structure and installation of technology. They also faced difficulty in managing O&M of facilities initially.





#### NGO capacity

- Additionally it was experienced that:
  - Knowledge of onsite non sewer based sanitation technology is still not widespread.
  - There is need to provide access to information that can help implementation agencies choose and install tech correctly.
  - Standardization is required in D&M methods of toilet (superstructure) and technology.

#### Funding

- In absence of donor or government funding, Corporate Social Responsibility (CSR) mode of funding was explored to fund this pilot project. However interest from CSR donors was limited due to various reasons such as:
  - Sanitation not being a focus sector
  - Donor finding investment too high due to additional cost of treatment technology compared to projects in which sewer or septic tank is available
  - CSR donors interested in investment only at locations around their production units
  - Some donors in sanitation and hygiene space showed interest but they wanted to invest at large scale in BCC component to create demand for safe sanitation
- Large scale programs such as Heritage City Development and Augmentation Yojana (HRIDAY), Swachh Bharat Mission (SBM), Japan International Co-operation Agency (JICA) can be explored when project is scaled to city level
- Interest for PPP model has been low in project due to:
  - Higher investment in treatment technology
  - Low advertising revenue in Varanasi due to lack of regulations around hoardings in public place giving unrestricted access to illegal advertisers.
  - Limited user fee potential due to poor user fee collection in city



