

Workshop on Mainstreaming Citywide Sanitation

4-5 April 2016

About Centre for Science & Environment (CSE)

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About the Workshop Objectives

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4th April 2016

Delhi

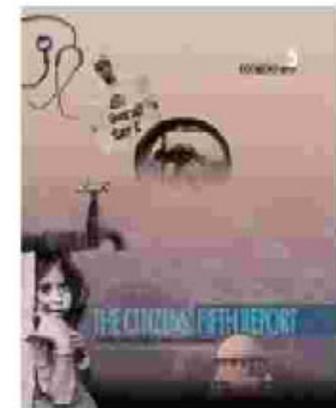
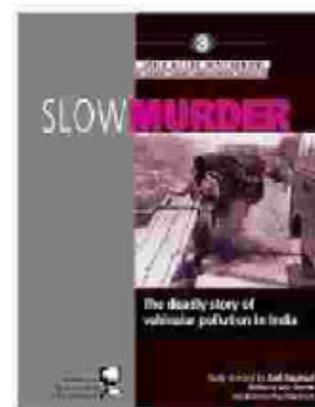
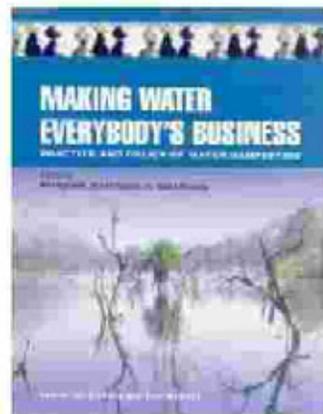
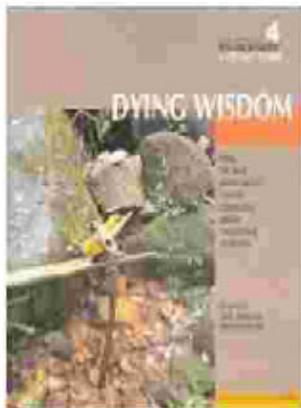


CSE – Background

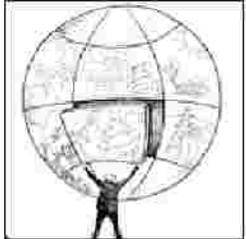
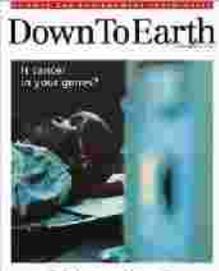
Set up in 1980's - a New Delhi based registered non profit society.

The centre promotes **sustainable development with equity, participation and democracy** through –

- knowledge based activism
- policy research combined with public awareness

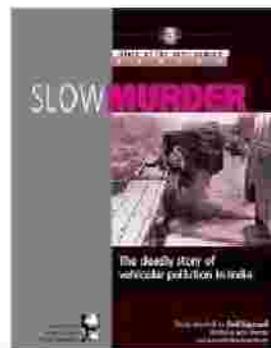
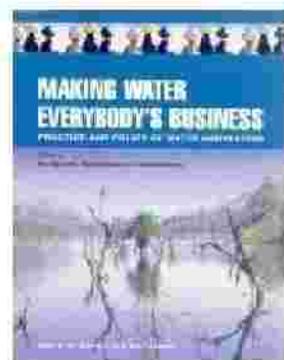
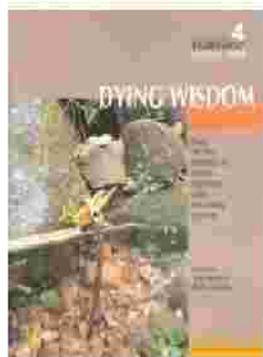


35+ years, 150+ staff, learning, sharing and pushing for change

Policy research & advocacy	Documenting to build knowledge	Disseminating knowledge	Training & education
Sustainable mobility & Clean Air 	Knowledge portal	Down To Earth	Green School Programme
Sustainable habitat	Climate change Resource Centre	Gobar Times	Media Resource Centre
Sustainable industrialization 		Books 	Anil Agarwal Green College/ Environment Training Institute
Sustainable Water - Waste water management 		Films 	Regulators training
Climate change			South-South Learning, training and capacity building
Renewable energy			
Food safety & toxins			

CSE WATER PROGRAMME – INITIATIVES

1. Greening rural development
2. Septage management including decentralised wastewater treatment incl local reuse/recycle
3. Conservation / protection/ restoration of water bodies in urban areas including rainwater harvesting
4. Water sensitive design and planning including water efficiency & Conservation
5. River Pollution
6. Technical advisory support to implement Best Management Practices.



Water Programme :

Aims to secure sustainability in water and wastewater management

**Knowledge
Creation,
Advocacy
and
Capacity
Building**

- Research to understand nature of problems and develop solutions
- To enable institutions and people undertake actions in managing water / wastewater and implementation of best practices.
(technical advisory, training workshops, training manuals)

**Building
knowledge
Networks**

- To strengthen all those who are involved in managing their water - governments, community/ individual
(newsletter, model projects, water information / rain centres and Paani Yatras)

**Awareness
Creation**

To make households, industries, institutions, villages and urban *mohallas*, all recognize the importance and value of Water. **(reports, articles, films, exhibitions, lectures, website)**

About this Workshop & its Objectives

National Urban Sanitation Policy 2008

All *cities and towns become totally sanitized, healthy and livable*, ensure and sustain public health and environmental outcomes for all their citizens.

Milestones for 100% Sanitation

1. Open Defecation Free
2. Wastewater and Drainage safely managed
 - a) All grey water collected and disposed off safely;
 - b) All storm water is properly managed

Sanitary and Safe Disposal

- **100 % of human excreta and liquid wastes from all sanitation facilities must be disposed of safely.**

This will be achieved by:

- Ensuring that all **human wastes are collected, treated and disposed of safely;**
- Promoting proper disposal and treatment of sludge from **on- site installations (septic tanks, pit latrines, etc.);**
- Promoting proper functioning of network-based sewerage systems and ensuring connections of households to them;
- **Encourage recycle and reuse of treated waste water for non-potable applications,** wherever possible.

- **Responsibility** for provision of sanitation facilities in the country primarily rests with **local government bodies**.
- The **State and Central Govt. act as facilitators**, through enabling policies, budgetary support and capacity development
- Central Govt. **through the 5 Year Plans**, guides investment in the sector by allocating **funds for Strategic priorities**.

Major initiatives - Timeline

- 2008 - Release of the National Urban Sanitation Policy
 - **Service level benchmarking** : benchmarks adopted in six critical areas incl. WS and Sewerage etc.
- 2009 - Capacity building schemes for ULBs – supported by creation of CoE at nine reputed institutions
- 2010 - **Ranking of 436 Class I** cities in 2010 under NUSP

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- 2011 – CSE Policy paper on Septage Management

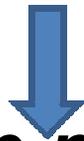
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- 2013 – MoUD Released **Advisory** on Septage Management **to ULBs**

Major initiatives - Timeline

- Mizoram, Agartala, Tamilnadu, Karnataka **states issued notification / policy** on septage management **including pilot projects.**



- **2014/15** – Swacch Bharat (U/R), Smart Cities – 100 no.s , AMRUT – 500 no.s cities & NMCG – 118 town / cities along river Ganga



All national flagship programmes and states now focusing on sanitation focusing on solid and liquid waste management **incl. septage management.**

National Programmes

SBM	AMRUT	NMCG
<ul style="list-style-type: none">• Covers all (4040 no.s) statutory towns• 100% elimination of open defecation• Targets by 2019 : 1.05 million toilets, 5 lakh community toilets, 100 collection, processing and disposal of solid waste	<ul style="list-style-type: none">• Cover 500 towns/cities• 100% coverage with water supply• 100% coverage with sewer connections or septage management system	<ul style="list-style-type: none">• Focus on 118 towns/ cities along River Ganga• Focus on river pollution abatement – sewage and industrial effluents

Sewage : more sums

Water supply, wastewater generation, treatment in Class I & II cities (MLD) 1978-2015



Two cities Delhi & Mumbai have 31% of total treatment capacity installed in India.

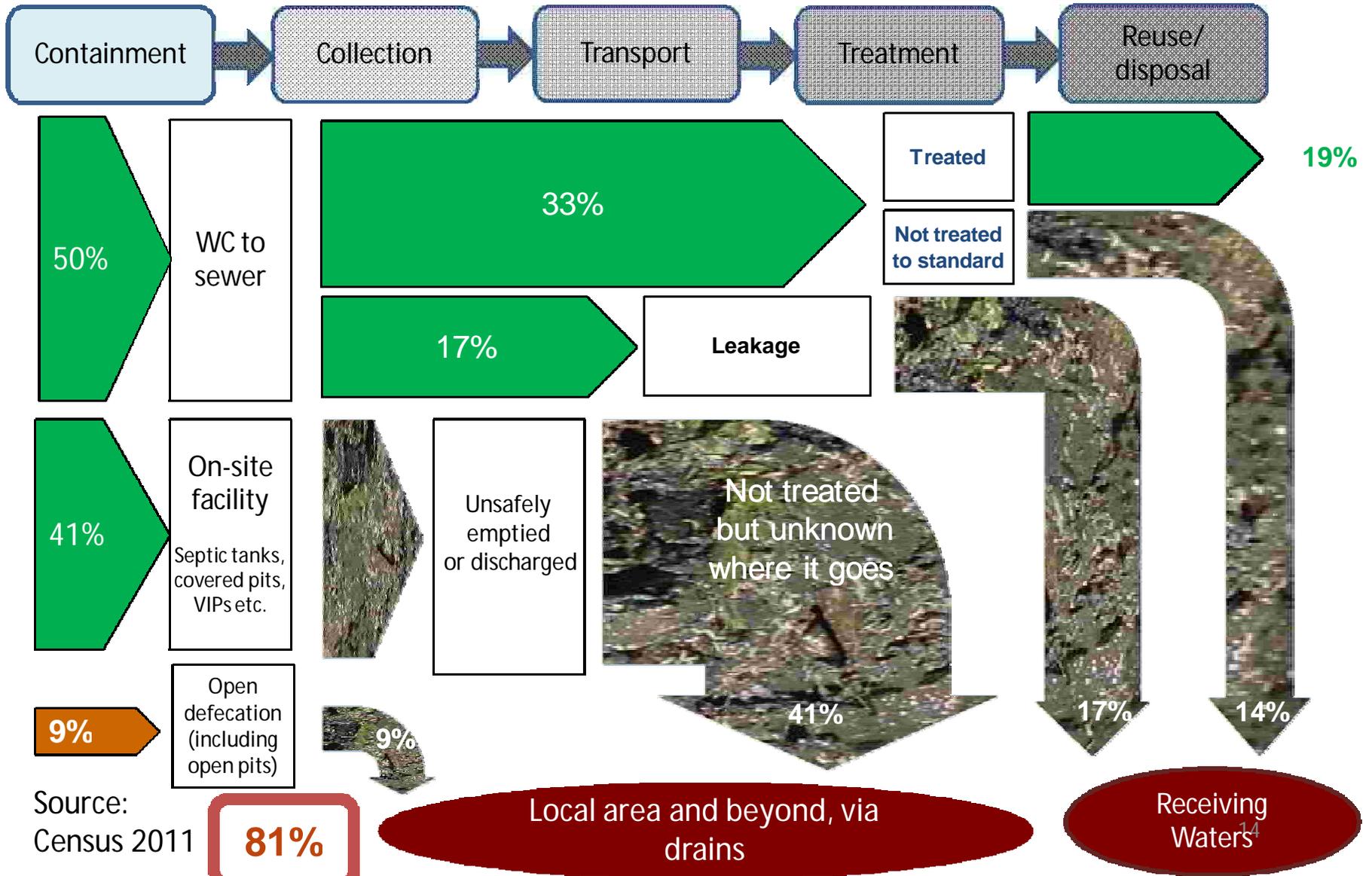
Source: CPCB Reports (1978,1988,1995,2006,2009,2015)

- 30% of total sewage can be treated and 31 % of treatment capacity in Delhi & Mumbai.
- Significant population still dependent on **Septic tanks** with inadequate mechanisms.

Urban India : Excreta Flows

Source : WSB World Bank

Sewer coverage	No of Cities	% of population
<10 %	191	16.45%
10 - 30%	158	20.10%
30 - 60%	75	24.22%
>60%	78	39.23%



Workshop

Day 1 : 4th April 2016

Session 1: Safe Disposal and Reuse of Faecal Waste

Session 2: Septic tank - disposal system and treatment

Day 2 : 5th April 2016

Session 3: Tools for decision making to upscale / include FSM in Sanitation Plans – International Case Studies

Session 4: Policies for decision making to upscale / include FSM in Sanitation Plans

Session 5: Policy Integration Challenges and Opportunities

Aim & Objective of the Workshop

- to promote active exchange of experiences of national and international opportunities and challenges in excreta management - thereby mainstreaming citywide sanitation.
- Cross learning with key sector policy makers, national/state functionaries, professionals, NGOs, international donor agencies and researchers who are involved in promoting sustainable and affordable sanitation

Technical Sessions – Day 1

- **Session 1: Safe Disposal and Reuse of Faecal Waste**

This session will discuss fundamental issues addressed in any laboratory dealing with faecal waste. How have labs contributed to technology solution and policy? What did they do – projects/analytics? Also discuss FSM in practice: from lab to field and field to lab – questions of a practitioner.

- **Session 2: Septic tank - disposal system and treatment**

This session will discuss the different types of on-site systems – septic tanks (as per IS standards) or improved, various types of containment, disposal system and treatment with example from towns / cities India.

Discuss some national experiences of on-site /decentralised faecal waste treatment systems including potential and barriers in of faecal waste for agriculture.

Understand technologies in details in terms of science – how /where it works and when it works (including regulations, performance monitoring and assessment)?

Technical Sessions – Day 2

Session 3: Tools for decision making to upscale / include FSM in Sanitation Plans – International Case Studies

The session will present international case studies on – how does city include FSM / on-site waste management in sanitation plans and experience sharing on cost, regulation, land requirement, efficacy of treatment.

Session 4: Policies for decision making to upscale /include FSM in Sanitation Plans

This session presents tools / policies for decision making upscale / include FSM in sanitation plans. Both BMGF supported and other key actors will present on – How to support assessment in terms city's situation in terms faecal waste management, include interventions in sanitation plans addressing sanitation for all.

Session 5: Closing Session : Policy Integration Challenges and Opportunities

The session presents experiences and issues of state / cities in developing city wide sanitation plans.

The aim is to discuss the barriers and brainstorm tools, technologies and policy integration challenges and state programmes.

