

**Regional workshop  
on  
Energy and Resource Efficiency in  
Urban Water Management**

***Dr Suresh Kumar Rohilla***  
*Programme Director – Water Management, CSE*

June 20, 2013

Kolkatta



# About CSE

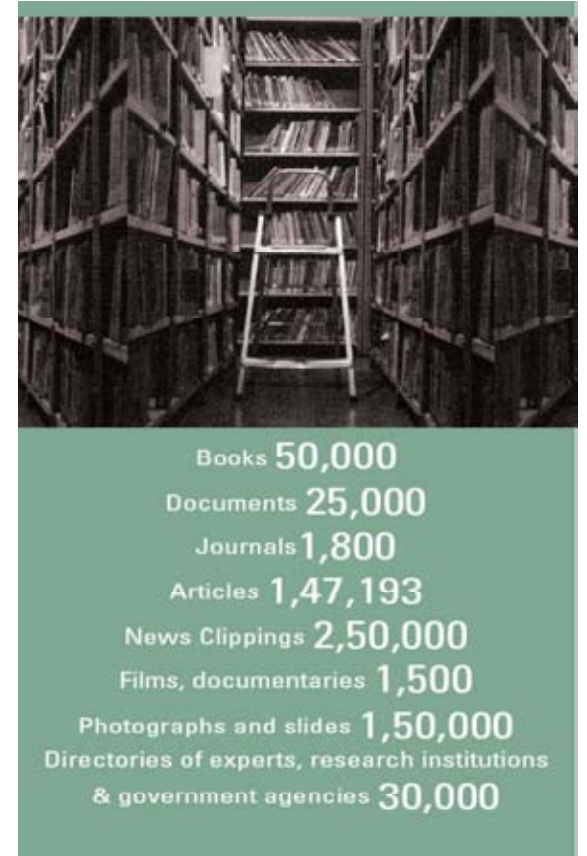
Centre for Science & Environment (CSE): is a Delhi based public interest research and policy advocacy organization set up in 1980.

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

- **knowledge based activism**
- **policy research combined with public awareness**

and was awarded the –

Stockholm **World Water Prize (2005)** for its policy influence in building new paradigms for sustainable water management.



CSE also currently - works in India and across South Asian region and is designated :

**Centre of Excellence** in of Urban Development in the Sustainable Water management area, Ministry of Urban Development, GOI for research & capacity building support JnNURM /ULBs.

**Nodal centre for training of Regulators**, Ministry of Environment & Forests, GOI.

**National hub for knowledge creation and capacity building**, Ministry of Drinking Water Supply and Sanitation, GOI.



## CSE – Programmes

- Communication and Awareness
- Research and Advocacy
- Education and Training
- Knowledge Portal
- Pollution Monitoring

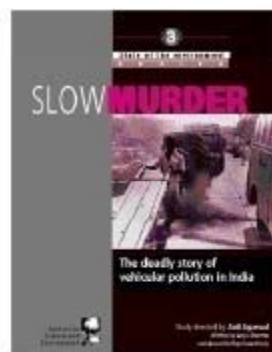
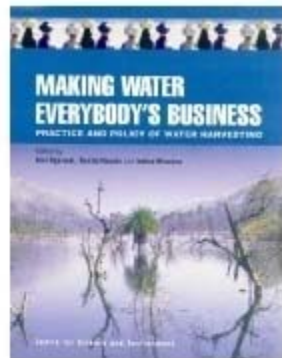
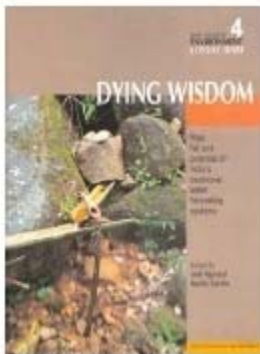
### Areas of work :

Air Pollution, Green Buildings, Climate Change and Renewable Energy, Industry and Environment, Food Safety and Toxins, Environmental Education and Training and **Water Management.**



# RESEARCH

1. Wastewater Management
2. Rainwater Harvesting
3. Water Efficiency & Conservation
4. River Pollution
5. Lakes/ Wetland Conservation



# CAPACITY BUILDING

- Decentralized Water Management
- Rainwater Harvesting
- Decentralized Wastewater Treatment & Reuse
- Water sensitive design and planning

- *across India and South Asia*



# KNOWLEDGE DISSEMINATION



# Re: public

A word cloud visualization showing various actors involved in water governance. The words are arranged in a vertical stack, with some appearing more prominently than others.

- state-level regulators
- state-level appraisal committees
- civil engineers
- architects
- urban planners
- environment consultants
- municipal water managers
- plumbers
- masons
- students
- policy-framers
- decision-makers
- lawyers
- journalists
- field-level practitioners
- civil society groups including NGOs

# outreach out







Centre for Science and Environment

[ABOUT CSE](#)

Who we are

[DONATE](#)

Support CSE

[JOBS](#)

Work/Volunteer

[BLOGS](#)

CSE Bloggers

[PRESS](#)

CSE in news

[CONTACT US](#)

Forum

## Latest News >

- Over thousand wild animals killed in MP
- Another lion dies
- Adarsh members to challenge demolition order in HC
- Dang

Search

[Home](#) | [Air Pollution](#) ▾ | [Water Management](#) ▾ | [Industry & Environment](#) ▾ | [Education & Training](#) ▾ | [Food safety and toxins](#) ▾ | [Climate Change](#) ▾ | [Media](#) ▾

## Down To Earth



### DOWN TO EARTH: COVER STORY

Sponge irons dirty growth  
Sponge iron industry is set to drive future steel production of India.

[READ MORE](#)

1 | 2 | 3 | 4 | 5 PAUSE

## Updates

### Diesel hides behind CNG | 0 Comments

What's going on? First the key partners of the Central Pollution Control Board -- IOC, and NEERI -- involved with yet to be released source apportionment study made claims publicly that LPG is the most

## Blogs: Recent Posts



**Sunita Narain**  
Down To Earth

15 January 2011

[How to approach environmentalism](#) | 2 Comments



**Gita Kaurana**

## Announcements

**Dialogue on Improving Quality and Performance of Natural Gas Vehicle Programme in South Asia**

**Date:** January 20, 2011,  
Dhaka, Bangladesh

**CSE's First Country Media Briefing on the Challenge of Urban Air Quality and Mobility Management**

**Date:** January 22, 2011  
Dhaka, Bangladesh

**Managing Urban Air Quality: Focus on Clean and Fuel Efficient Vehicles An orientation programme for policy makers**

**Date:** January 27 - 29, 2011

**S h o p**  
at CSE Store

**Buy our**  
Books, VCDs, & DVDs,  
T-Shirts & more




**Support**  
environment



# CoE Webpage on CSE Website

[CSE WEBNET](#) [Down To Earth](#) [Gobar Times](#) [Rain Water Harvesting](#) [CSE Store](#) [India Environment Portal](#)



## Centre for Science and Environment

[ABOUT CSE](#)  
Who we are

[DONATE](#)  
Support CSE

[JOBS](#)  
Work/Volunteer/Intern

[BLOGS](#)  
CSE Bloggers

[PRESS](#)  
CSE in news

[CONTACT US](#)  
Forum

**Latest News >** [coal allocation process already cleared by govt](#) • [PMO's Swift Action Saves Govt](#) • [Lack of](#)

[Dimna dam survey](#)

[Home](#) | [Air Pollution](#) | [Water Management](#) | [Industry & Environment](#) | [Education & Training](#) | [Food safety and toxins](#) | [Climate Change](#) | [Media](#)

[Urban water](#)

[Rural Water](#)

[Center of Excellence](#)

[Rain Water Harvesting](#)


[Decentralised Waste Water Treatment](#)

[Green Building Water Management](#)

[River Pollution](#)

[Wetland Conservation](#)

[Pause](#) [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#)



### ANIL AGARWAL DIALOGUES GREEN CLEARANCES

### Updates

### Blogs: Recent Posts

#### Announcements


**The Gobar Times Green Schools Awards Ceremony 2011-2012**

**Date & Time:** March 28, 2012, 4pm to 6pm


**CSE's South Asian Media Briefing Workshop on Food Safety and Environmental Toxins**

**Date:** March 29-30, 2012

**Roundtable Meeting on 'Energising the Energy Efficiency in Buildings**

Follow us on 

CSE's 7th SERIES OF THE **State of India's Environment** IS NOW AVAILABLE





# Background to the workshop

## JNNURM Phase I :

*The aim was to develop **select cities into model sustainable areas** envisaging development of slums, **accessibility to drinking water, sewerage**, solid waste management, roads, and street lights.*

Status update –

- with over a majority — about **73% — of projects** sanctioned under JNNURM-I still **under implementation** as on March 2012, and
- the **capacity** of the state and local bodies, such as municipalities, **to plan and implement** these projects **remained poor**
- 5% of the total outlay of JNNURM funds for capacity building but only **10 % of allocation utilisation**



## **Shortcomings of Phase I**

- 1. Poor planning process and exclusion of peri-urban areas.**
- 2. Failure to adopt service level bench marks.**
- 3. Lack of adequate capacity in states & mission cities.**
- 4. Inadequate differentiation made to suit different conditions of small and large cities. As a result there was variation in inter state completion of reforms (physically and financially).**



*Source : Planning Commission Report, March 2012:*

## JnNURM Phase II

- Establish select **smart cities** in each of the 28 **states** in the country in the second phase of the (JNNURM).

- Smart cities would be totally carbon neutral and energy efficient.
- Insist on **time-bound action** by all states in particular focus on water too be saved and better managed.



# Policy Reforms

**12<sup>th</sup> Five Year Plan - Water section clearly highlights the change in policy**

*... mentions that **public funding to be done only if Water supply projects have integrated sewage treatment including reuse/recycle***

**National Water Mission under PMs National Action for Climate Change**

*... setup a target of **20 % water savings /efficiency across Sectors to reduce energy footprint.***



JnNURM/NURM Phase II to reflect the above -

## Phase II will focus on ( and is the need of the hour)

- Water efficiency /conservation, wastewater management, solid waste management
  - in particular rainwater harvesting and protection of urban water bodies/lakes as specific focus areas.
- Wastewater recycling and reusing - that is completely missing in our water management system.
- Managerial and policy changes to handle the water management issues and community participation.
- Capacity building of the municipal officials to execute decentralised / energy and resource efficient projects in UWM.





## Need for the Workshop on the theme -

- The simple fact that public water and sewer service is getting expensive that even rich may not be able to afford
- Energy and resource efficiency /conservation helps in lowering costs, improving the reliability of water and waste systems as well as
- helps achieve environmental goals by states and communities.





# Objectives of the workshop

- To generate awareness about the best management practices (BMPs), state of art knowledge, policy and reforms in the area of urban water management in target states.
- To discuss with key stakeholders the concept, issues/barriers and experiences in mainstreaming of the reforms related to EE & RE in UWM.
- To explore capacity building support required to implement projects aimed at mainstreaming environmental sustainability related reforms in the NURM schemes.



## Target Participants

The workshop will be attended by key actors involved in urban water management in target states:

– **officials from municipalities/ULBs, development authorities, SLNA, PMU/PIU, department of urban development / W&SA/PHED**

**- NGOs and academics**

**- Researchers and other stakeholders**

All those involved in advocacy for sustainable water management in target region states/ cities - ULBs.



## Key themes to be discussed include -

- Co-management of water and energy
- Energy and resource efficiency incl. conservation of in UWM
- Recent attempts of energy water efficiency – energy efficiency in municipal water/wastewater treatment, water-energy efficiency at building level including decentralized treatment of sewage – natural / biological systems
- Protection of water quality and cleaning up of polluted rivers and lakes - acceptable risks and safe practices in reuse/recycle



THANK YOU

