

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

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Puducherry



# About CSE

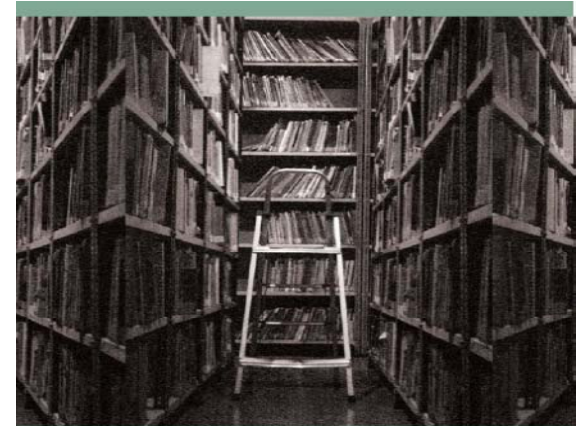
Centre for Science & Environment (CSE): is a Delhi based public interest research and policy advocacy organization set up in 1980.

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.



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Directories of experts, research institutions  
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**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

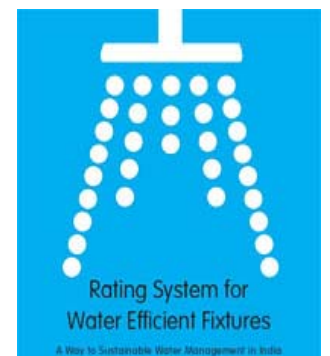
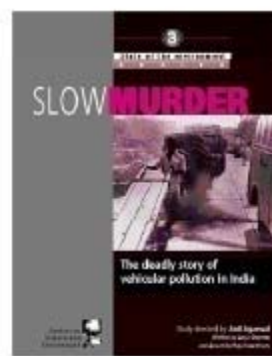
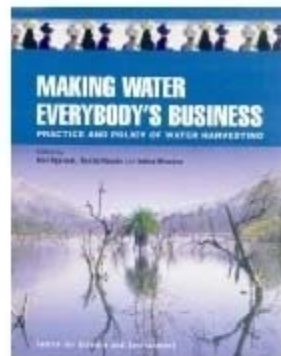
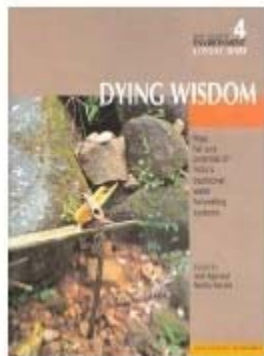
### **Areas of work :**

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



# RESEARCH & CAPACITY BUILDING

- Water efficiency /conservation including reuse
- Decentralized Water Management
- Rainwater Harvesting
- Decentralized Wastewater Treatment & Reuse
- Water sensitive design / planning
- Green infrastructure
- River Pollution
- Urban wetlands/lakes conservation



# Re: public

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

**outreach out**



# KNOWLEDGE DISSEMINATION





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DOWN TO EARTH: COVER STORY

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

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## 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

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ANIL AGARWAL  
DIALOGUES  
GREEN CLEARANCES

## 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

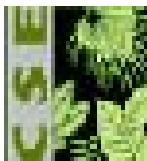
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# Background to the workshop

## 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**



... now is extended for 3 years .

# 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

