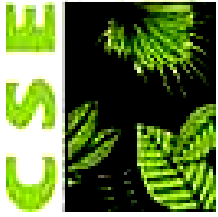




# Introducing CSE's Gobar Times Green Schools Programme





# About CSE

Centre for Science and Environment  
a New Delhi-based public interest group.

- Raises issues of concern
- Informs people, influences public thinking
- Creates public opinion And Catalyses Change





# GSP and Design Practices

What does 'building green' really mean?

and

What role does the  
Green Schools Programme  
play in that?





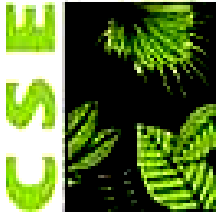
# No more clones please!

Architects, designers are thinking differently. No more building energy guzzlers first and then trying to fix the leaks.

The New Formula:

Building green=Optimizing local ecology=planning efficient resource-use=setting new building codes





# GSP and Design Practices

Current policy status:

- National Building code touches resource efficiency standards as afterthought.
- Energy Conservation Building Code is voluntary.





# GSP and Design Practices

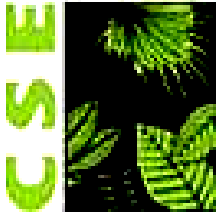
The new formula will only work if the **USERS** want it. And are willing to practice it.

Therefore,

Setting a new **Behavioral Code** is critical.

**GSP** does that.





# Why Schools?

A. Because they are an ideal breeding ground:

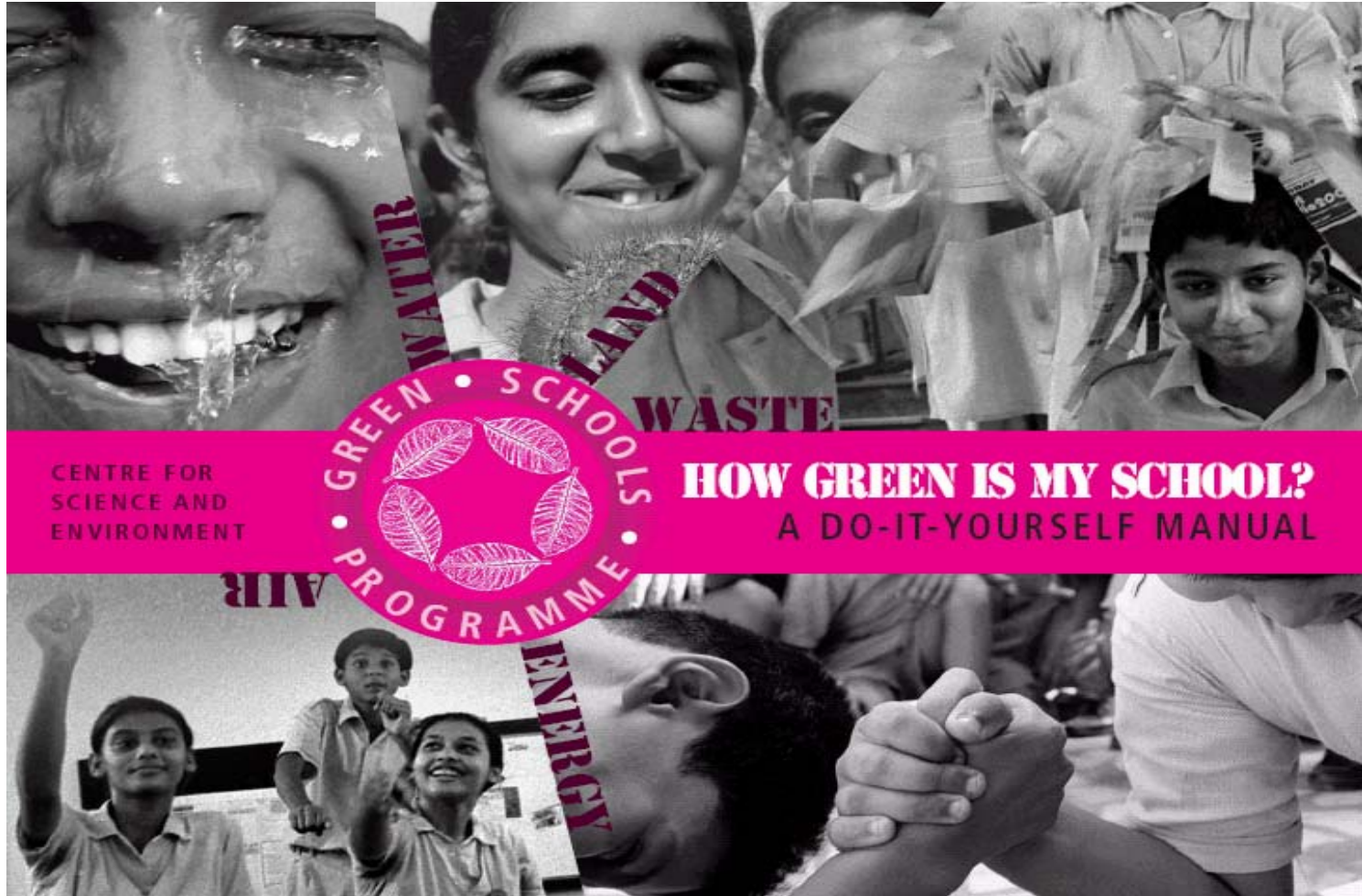
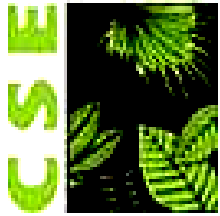
Of mindset. Of practices.

B. Because they are the fastest growing sector:

Education Act signals explosion of structures. Strategic planning can have revolutionary impact.







CENTRE FOR  
SCIENCE AND  
ENVIRONMENT

# HOW GREEN IS MY SCHOOL?

A DO-IT-YOURSELF MANUAL





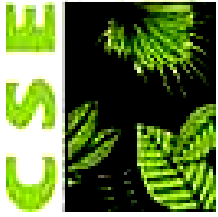


# Beyond Books

**A do-it-yourself hand book on how to audit water, air, energy, waste, and land, within school premises.**

**Students and teachers come out of classrooms—to count, weigh, measure, explore and analyse.**





# Helping hand

- They rate themselves as environmental managers.
- And then plug the gaps identified in current practices.

GSP is a smooth curriculum fit





## Why GSP is a must?

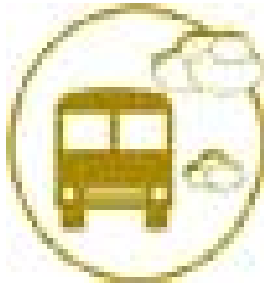
- ❑ It is a tool to teach environment in the right perspective. Especially in a nation where Economy thrives on Environment. Its about real life and livelihood.
- ❑ It assembles authentic data on status of resources and to identify trends. It clearly indicates what do we need to do, where and how.





# Under the scanner

**Air**



**Water**



**Land**

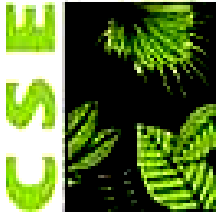


**Energy**



**Waste**





# Our partners

GSP institutionalised.

5 state governments adopt it.

Other partners:

- 8 state school networks
- 3 Union government chain

Manual translated in 6 languages. 15000-strong network.





# Water



- The rating is on:
- How much does your school use?
- Are the sanitation facilities adequate?
- Are conservation practices in place?
- Does it harvest rainwater?
- How much does it recycle?

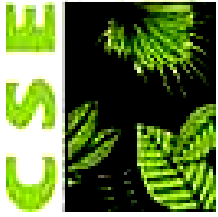






**Water audit team of Kerala Public School, Kadma, Jamshedpur**

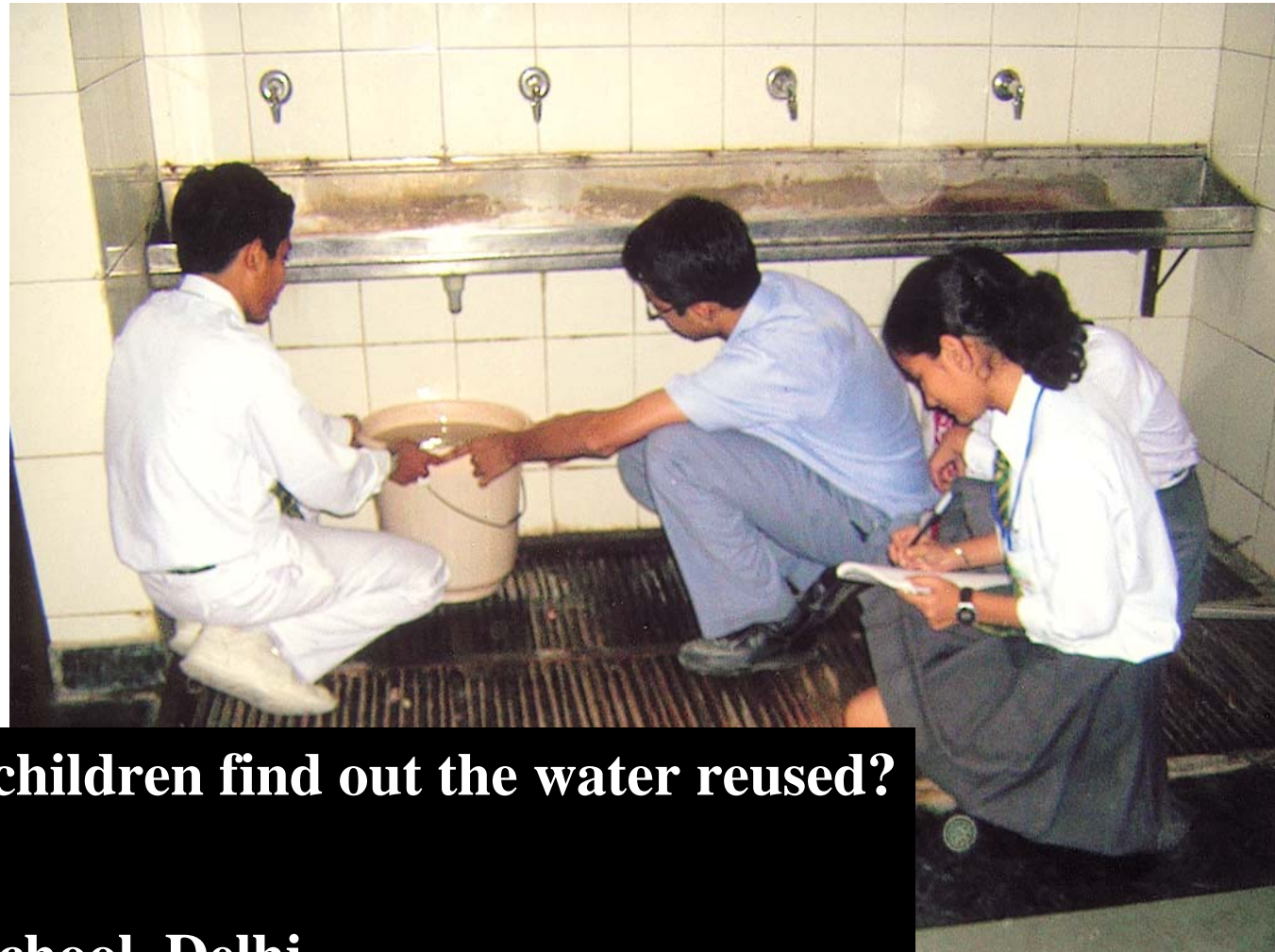




**Water audit team of Adarsh School,  
Vikaspuri, New Delhi**



**GobarTimes**



**How would children find out the water reused?  
–Monitor it.**

**Evergreen School, Delhi**







# Air



The rating is on:

- What is the air quality in the locality?
- How does the school community commute?
- How eco-friendly are the school-run vehicles?



Students from many schools have really enjoyed this process

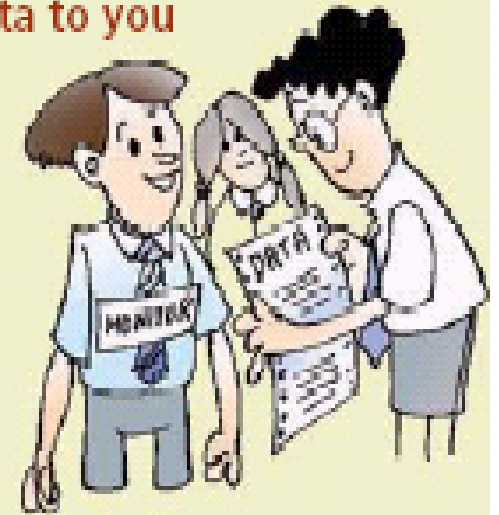




Class VIII -A Group No: 5 & 6

	<u>NAME</u>	<u>VEHICLE</u>	<u>(km)</u> <u>DISTANCE</u>
1	Aakriti Kapoor	Van	4
2	Aceusha Sharma	Rtv	3
3	Albi Thomas	Bus	10
4	Anam preet Kaur	Van	
5	Anna Muniba	Rickshaw	1.5
6	Ambreen Bano	Rickshaw	
7	Anam Qureshi	Rickshaw	1
8	Ann Babu	Van	4
9	Anush sibly	Bus	10
10	Bhavinia Andra	Bus	5
11	Deepanshi Taggi	Bus	8
12	Diksha Mongea	Bus	
13	Diksha Juelan	Metro	
14	Divya Jha	Rickshaw	0.5
15	Gyatha Sehgal	Van	
16	Habiba Sybil Saeed	Bus	3
17	Himani Sharma	Rtv	6
18	Ishita singh	Bus	
19	Jyoti Gupta	Bus	
20	Khusboo goel	Van	11
21	Konshi Andra	Bus	6.5
22	Keeti Andra Sharma	Rickshaw	
23	Keeti Mehal Sharma	Bus	
24	Mehreen Fatima	Rickshaw	1.5
25	Mandita Sharma	Bus	

Contact individual class monitors to survey their classes for means of commuting, and forward the data to you



This is a commuter audit of Class VIII A in Presentation Convent, New Delhi.

Similar audit needs to be done with each member of the school community





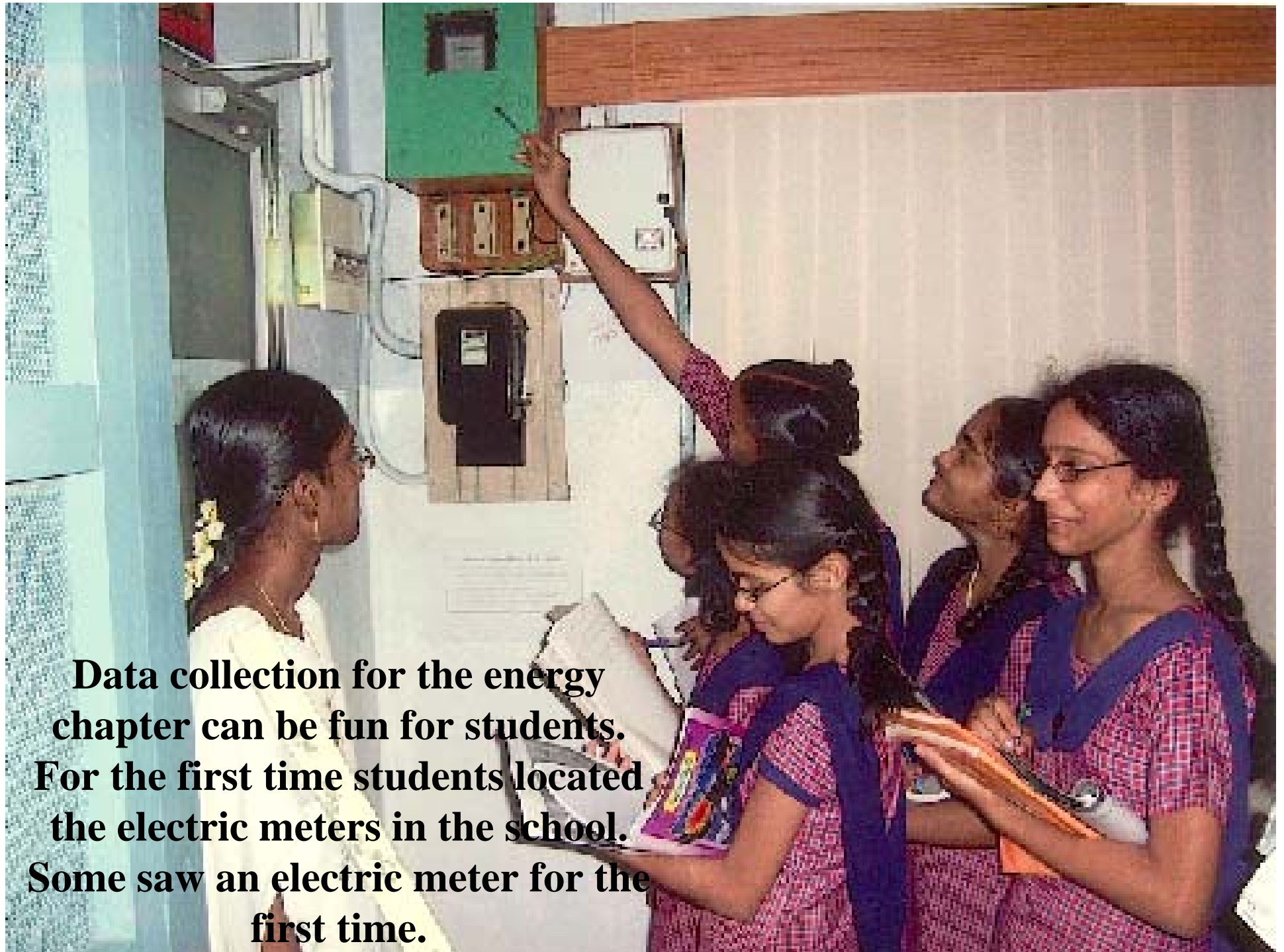


# Energy

**The rating is on:**

- How much does it consume?**
- What are the main sources of energy...and how eco friendly are they?**
- How much does it save?**



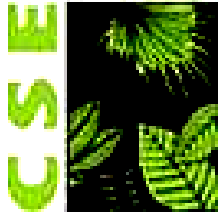


**Data collection for the energy chapter can be fun for students. For the first time students located the electric meters in the school. Some saw an electric meter for the first time.**



**Energy audit team of  
Salwan School,  
Rajinder Nagar at the  
school canteen**





## Land

The rating is on:

How much of its land is under green cover?

How many types of plants and animal species can you identify within premises?

Which pesticides do they use?





CSE



Students with oldest trees



JobarTimes



## Waste

- The rating was on:
  - How much waste does it generate?
  - How does it collect?
  - How much does it recycle?
  - How does it dispose?
  - Does it reuse text books?







**Sister Nivedita  
Sarvodaya Kanya  
Vidyalaya, Defence  
Colony also did a precise  
waste audit by  
measuring the amount of  
waste generated using a  
spring balance**





**For any kind of waste management practice, the first step is segregation of waste**





School 1

School 2

School 3

School 4

School 5



UPLOADING OF DATA ON THE INTERNET

DATA REPORTING SYSTEM

Analysis of data uploaded and shortlisting of schools

School 1

School 3

School 5

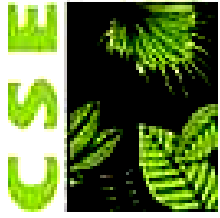
On site visit or Telephonic Interview of the school

**FINAL SCORES**

SCHOOL 1 = 297 POINTS RANK 3	SCHOOL 3 = 305 POINTS RANK 2	SCHOOL 5 = 314 POINTS RANK 1
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**GREEN SCHOOLS AWARD**



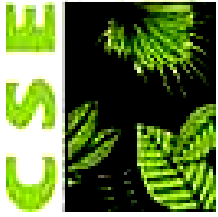


# The Awards Gala







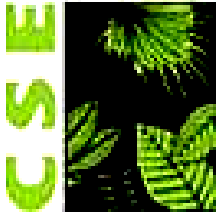


## 2006 audit said..

- ❑ Schools are aware of the importance of wise management. **But are weak in making linkages with real life situations.**
- ❑ Innovative methods are applied. **But follow-up process to measure and quantify the impact does not exist.**
- ❑ Environment-related programmes are still **extracurricular**. No structured approach is evident.





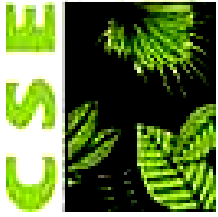


# 2007 audit said

Schools have mastered the art of auditing

- ❑ Outstanding data collection, tabulation, and analysis
- ❑ Assessment of impact of resource management practices more **precise, structured, and accurate.**
- ❑ Students involved in every step. **Sharp increase in awareness level.**





# In 2008...

For the veterans a new category  
**THE CHANGEMAKERS**

Who are they?

Schools which have been able to  
achieve basic and long-term  
changes in the mindset and  
lifestyle of :

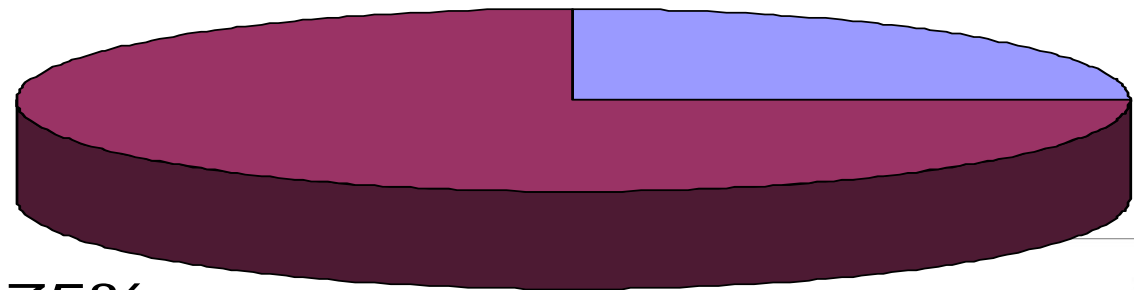
**School community, Parents, and the  
Neighbourhood**



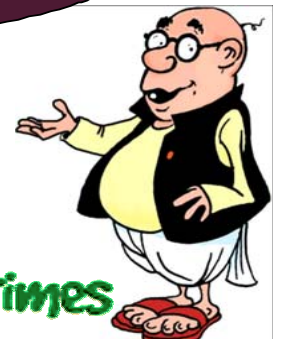


## Water in 2006 rain water harvesting

**But only 1 was  
harvesting the full  
potential. Most  
captured less than 3  
per cent...**



75%





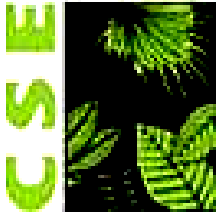
## Water in 2009

### Action on the ground

- ❑ All schools install rainwater harvesting structures. Most tap maximum potential.
- ❑ Sharp hike in conservation techniques. Schools recycle 100 per cent gray water.

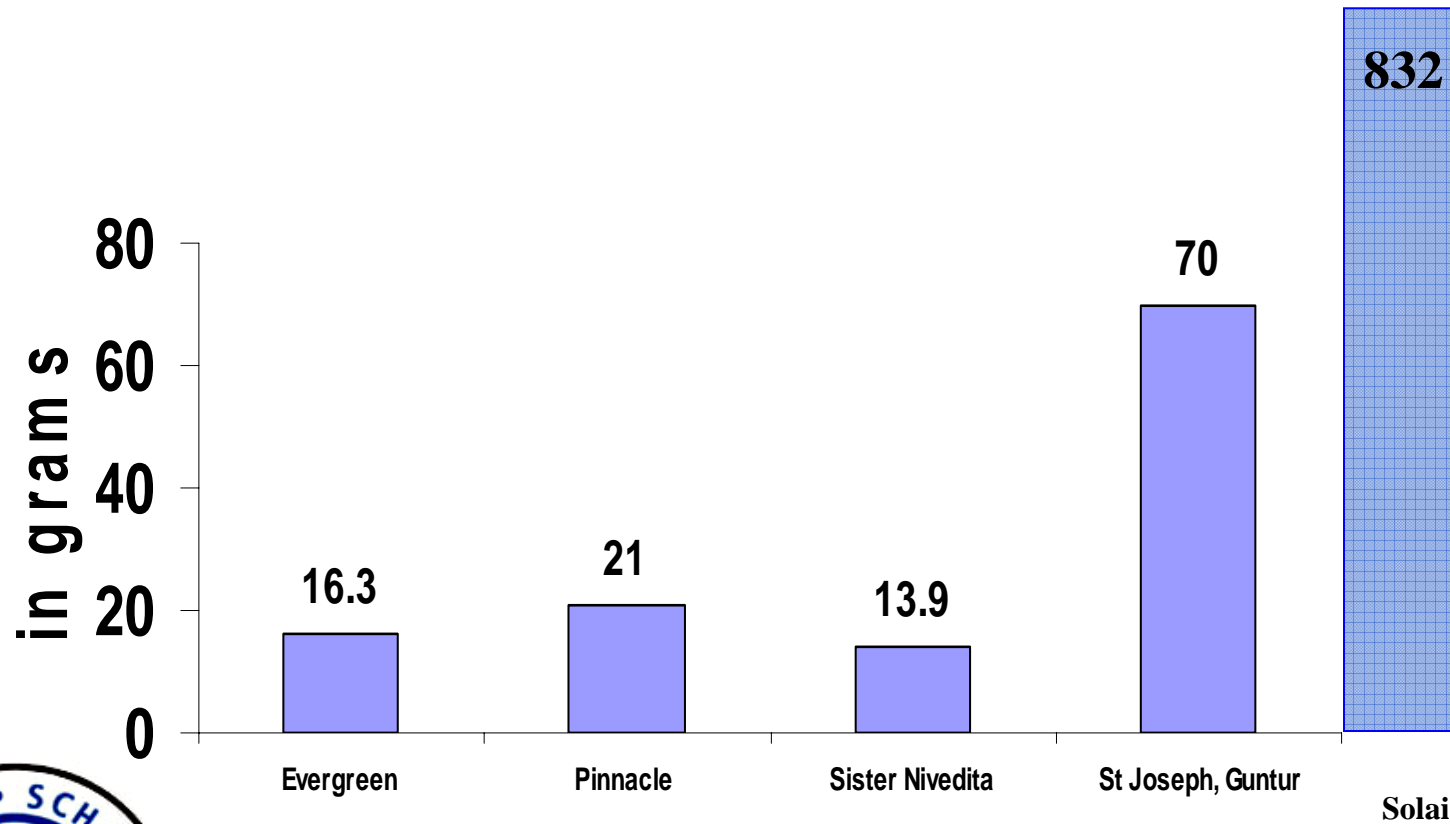






# Waste in 2006

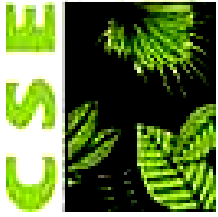
## Per capita waste generated?? **No data**



Only 5 out of 20 could account how much....



gobar times



## Waste in 2007

### Action on the ground.

- ❑ Every school assigned student groups to weigh waste. Teams included sweepers, gardeners, waste dealers
  - ❑ Used spring balances; hand balances; weighing machines.
- Scores had fallen. Quality of data has improved.





## Waste in 2009

Action continues...

- ❑ Changemakers record 100 per cent recycling
- ❑ Set up systems to reuse paper, plastic and food waste



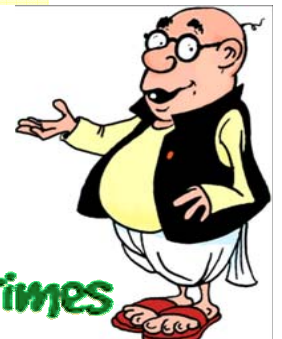


# Leading edge

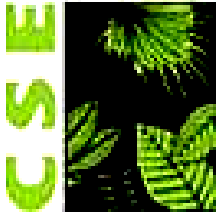
School rated on two parameters:

**How holistic is it:** Has it been able to bring all divergent elements under one **umbrella**. **Create cohesion.**

**How effectively has the GSP tool been used:** Evaluation of the level of involvement of different sections of the school community.



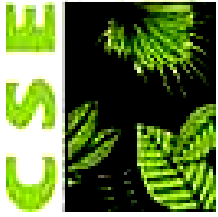




# Why GSP is a must?

- ❑ Schools where resource is scarce. Audit is needed to ensure basic needs are met
- ❑ Schools where there is plenty. Audit is required to prevent wastage.





# Is GSP relevant to Climate variability?

**Climate Change is embedded in every section.**

**Land, Air, Water, Energy. and Waste**

**It teaches how to manage the resources prudently.**

**It helps to adapt a less polluting, therefore, more sustainable lifestyle.**

**It indicates mitigation measures**



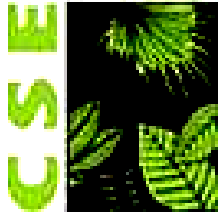


# GSP vis a vis Design?

GSP changes mindsets.  
**Radically.**

**AND** it triggers real time  
action on the ground.





# The GSP goal

IT BUILDS

A RESOURCE-LITERATE  
GENERATION

IT BUILDS

A NEW BEHAVIOUR CODE TO  
MATCH THE NEW BUILDING  
CODE.

