# Significance of sustainability education in schools and communities towards attaining zero waste

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#### Centre for Environment Education

- Established in 1984
- Centre of Excellence in EE
- Supported by Ministry of Environment and Forests, Government of India
- Affiliated to the Nehru Foundation for Development (NFD)





#### **CEE's Primary Objective**

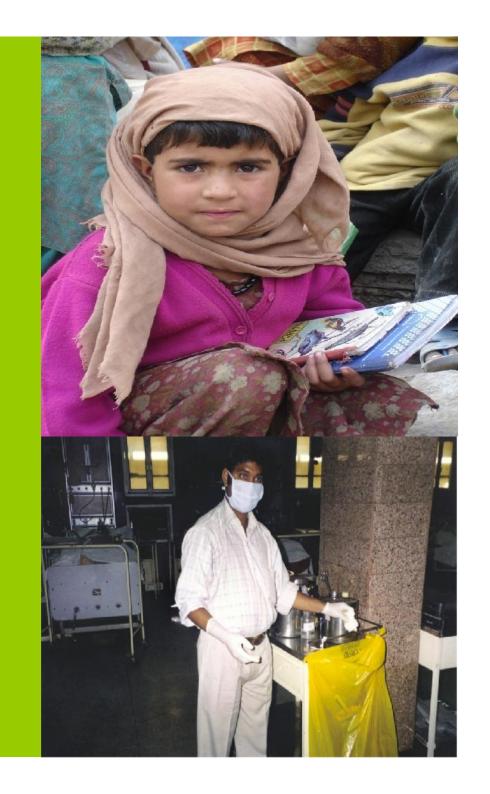
- Developing programmes and material to increase awareness about the environment and sustainable development.
- To raise public awareness and understanding of environmental issues, with a view to promote the conservation and wise use of nature and natural resources.





#### Thrust Areas (28)

- Education for Children
- EE in Higher Education
- Education for Youth
- Communicating environment through the Media
- Experiencing Nature
- Industry Initiatives
- Waste Management
- Sustainable Urban and Rural Development

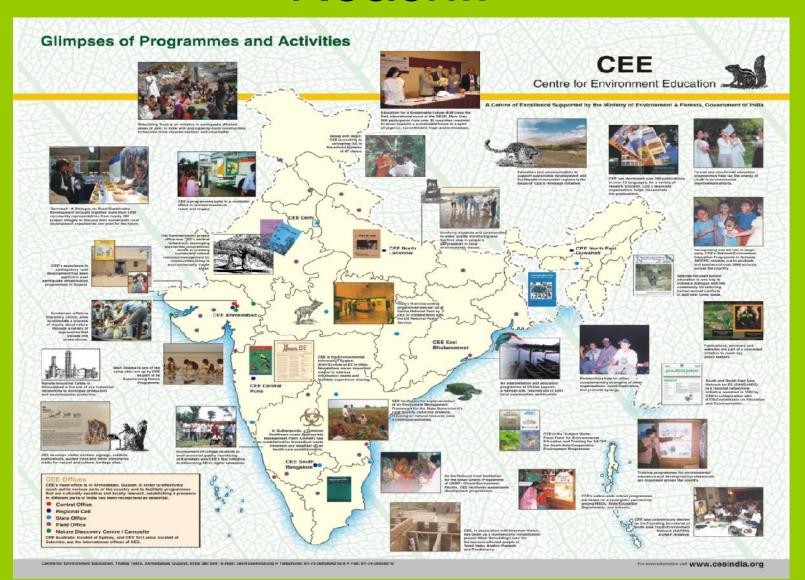


#### Thrust Areas (contd.)

- EE for Fragile Areas
- Biodiversity Conservation
- Eco-tourism
- Disaster Preparedness and Rehabilitation
- Water and Sanitation
- Initiatives for the UN Decade of Education for Sustainable Development



#### Reach..



#### Recognitions

- The India NGO Award for the western region (joint) in the large scale NGO category.
- CEE's website for children was selected to be finalist for the Stockholm Challenge Award 2008 in the category of Environment.
- The Ryutaro Hashimoto APFED Awards for Good Practices, by the Asia-Pacific Forum for Environment and Development (APFED).
- Srishti Good Green Governance Award
- Plastic on Award: Recognizing Excellence Winner Awarded to Centre for Environment Education, New Delhi Innovation in Plastics.

#### Waste Management Scenario...



### Unscientific disposal of waste leading to soil and groundwater pollution.



## Mixing of General and Hospital waste with animal feeding on it (Zoonosis)



#### Vulnerable group at health risk



## CEE's waste management education initiatives

Started in 1990's and have been aimed at policy interventions, awareness and implementing pilot level best practices on waste management in various cities of the country



#### **Objectives of the Interventions**

- In achieving the principles of Reduce, Reuse and Recycling of waste to divert maximum amount of waste from going to landfill.
- Piloting best practices on waste management.
- Education and capacity building on various aspects of waste management for behavioral change.

## Intervention in schools and community

#### **Approach**

#### Club Approach

Activities are done with eco club students as regular class lessons. These activities provide alternative ways of teaching/complementing/supporting - what is already there in the textbooks, and thus does not require additional time.

#### Whole School Approach

Students of Eco/Energy Clubs are expected to take their learnings to the entire school. Members of the Eco/Energy Clubs share their learnings with other students on a regular basis through various activities in built within the programme.

#### **Beyond School**

This includes a menu of actions, ideas and guidelines that helps students and teachers go beyond their role as Class and Club teacher, to take the lead in transforming and taking the awareness and action to society and community outside the school.

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#### **CLUB APPROACH**

Peer group/Eco club training and education..

## Participatory and Informal Education..



#### WHOLE SCHOOL APPROACH

Implementation and sustaining waste management activities at school level.

## Waste Audit and Waste Paper Recyling





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## Recycled papers made by students



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#### Composting at School Level



#### End use of compost



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### Vertical Gardens using used PET Bottles..





## Whole school awareness on waste management





## Competitions related to waste management





#### **BEYOND SCHOOL...**

Involving communities...

## **Exposure Visits to Recycling Units**



#### **IEC Campaigns**









#### **Student Reporters**











## Extensive education and capacity building of resident associations





## Behavioral Education: must for segregation at source



#### Inclusion of informal sector-Ragpickers/Waste retrievers









## Capacity building of sanitary workers of ULBs



## Education for Waste Based Entrepreneurship





#### Paper Waste Recycling





#### **Up-cycling of Waste Polybags**



## Education for replication to other organisations











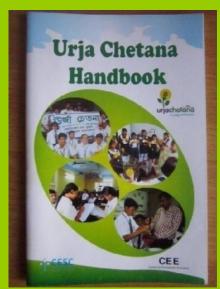


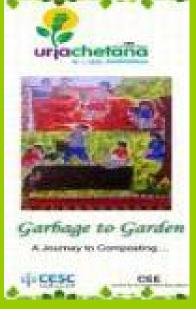
#### IEC on Waste Management











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#### **Impact**

- Around a total of 200 kgs of organic waste and 50 kgs of paper waste is being recycled/diverted from going into landfill in 6 months through the composting and handmade paper making by 30 schools.
- As a result of awareness and motivation, few schools are collecting 500 kg of waste paper and send to Paper Recycling Mill in a year regularly.

- Schools have been able to reduce the waste generation through conducting waste audits on regular basis.
- Most of the schools have declared their premise Polybag free zones. The polybags collected through campaigns are routed to the units who uses polybags with bitumen for road construction.
- Exposure trips have has led to increased practical knowledge of the students on the various aspect of waste management as per curriculum/studies in school.

- In 1994-95 PMC became the first ULB to officially register waste pickers through KKPKP (Kagad Kacg Patra Kashkari Panchyat, a registered trade union). Currently 2300 waste pickers provide segregated waste collection services to 4 lac households.
- PMC has been able to divert 60MT of waste away from landfills. 80-85% waste generated is recycled/processed

 The waste based entrepreneurship has lead to more empowerment of the people who are already involved in the waste management.

 The behavioural change education has also lead to increased reduction and segregation practices in many localities, which in turn lead to improvement treatment and thus towards zero waste. The education towards attaining zero waste is leading the schools and communities towards a sustainable future...



#### Thank You

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