



# EcoWaM



## Eco-schools Waste Management Programme



Online Teachers' Orientation Workshop  
13 October 2020



BESTSELLER' FOUNDATION



# Session 1

## Overview of the Programme



# Foundation for Environmental Education



- International environmental education organisation.
- Has members in 78 countries across the globe.
- Through its initiatives, empower people to take meaningful and purposeful action to help create a more sustainable world.
- Recognised by UNESCO and UNEP as a world-leader within the fields of Environmental Education and Education for Sustainable Development.



## BESTSELLER Foundation

- A private philanthropic foundation established in 2015 based in Copenhagen, Denmark.
- Supports initiatives and invest in businesses for environmental protection and social progress.
- Runs its activities in India and Africa.
- Focuses on one of the biggest problems of our time – **WASTE** 'how to reduce, reuse and recycle it'.



# Centre for Environment Education

- National institution engaged in developing programmes and material to increase awareness about the environment and sustainable development.
- Established in 1984 as a Centre of Excellence in EE was supported by the Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India.
- Affiliated to the Nehru Foundation for Development (NFD).



# About Eco Schools



- Launched in 1992
- International Sustainable Campus Programme
- Programme implemented in 64+ countries.
- Encourages young people to engage in their environment by allowing them the opportunity to actively protect it.
- Different national operators engaged in implementing the programme globally.

# Eco-Schools India



- Initiated by CEE as National Operator for India in 2014-15.
- Offered to primary school level for classes 1-5 (6-11 years old).
- Over 80 + schools are part of the programme.
- Offered in five themes – Water, Biodiversity, Energy, Waste and Healthy Living.
- Handprint flag awards for each of the thematic areas completed.
- Green Flag Award, Eco-Schools trophy and international certification to the school.







## EcoWaM - Eco Schools for Middle level

---

- Eco Schools programme for classes 6-8 (11-14) is launched in 2020 with a focus on waste management theme.
- To engage schools in involving students to run, lead and monitor waste management related activities at their school, home and community.



# About Collaboration



BESTSELLER FOUNDATION

CEE

Centre for Environment Education

- Supported by BESTSELLER Foundation for pilot run in year 2020-21.
- Aimed to cover 100 + schools from cities of Lucknow, Pune, Bangalore, Guwahati and Ahmedabad.
- Schools from other cities have also joined the programme.
- Aimed to support schools in understanding and bringing in sustainability into the educational activities of the school.



## Benefits

---

- Participation in International Sustainable School Programme
- To become a model school following Sustainable Waste Management Practices
- Prepare young environment leaders who can be role models for taking action for waste management at their home and school
- Access to Eco-schools educational resources
- Teacher training on online pedagogy focusing on sustainability education
- Mentoring and handholding of teacher for implementation of programme
- Access to application for Handprint award
- Raising the profile of the school as part of a large global network
- Connect to other environment initiatives of FEE and CEE.

## How to Participate?

---

- Registration of School
- Nomination of EcoWaM Teacher in charge
- Orientation of teachers on theme and seven step methodology
- Involvement of other teachers of middle level
- Formation of teams – 5 students each from classes 6 – 8
- Orientation of all students on the theme of waste management
- Discussion with Parents
- Conducting activities with the help of teachers module
- Documentation of the report on implementation of seven step methodology
- Submit report by 31 January 2021 for evaluation of Handprint award.

# Handprint Award

---

- Certificate to all participating schools and students.
- Mentor Certificate to teachers.
- Handprint Flag felicitation to best performing schools in March 2021.





# Session 2

## About Sustainability and Waste Management



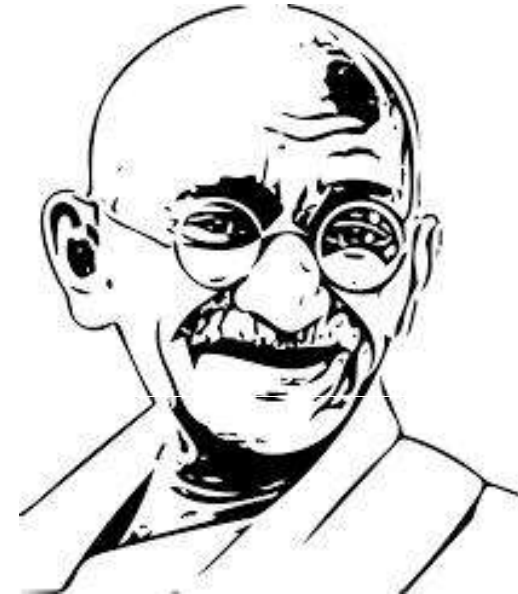
BESTSELLER' FOUNDATION



# Sustainable Development

---

*“Earth provides enough to satisfy every man's needs, but not every man's greed”*

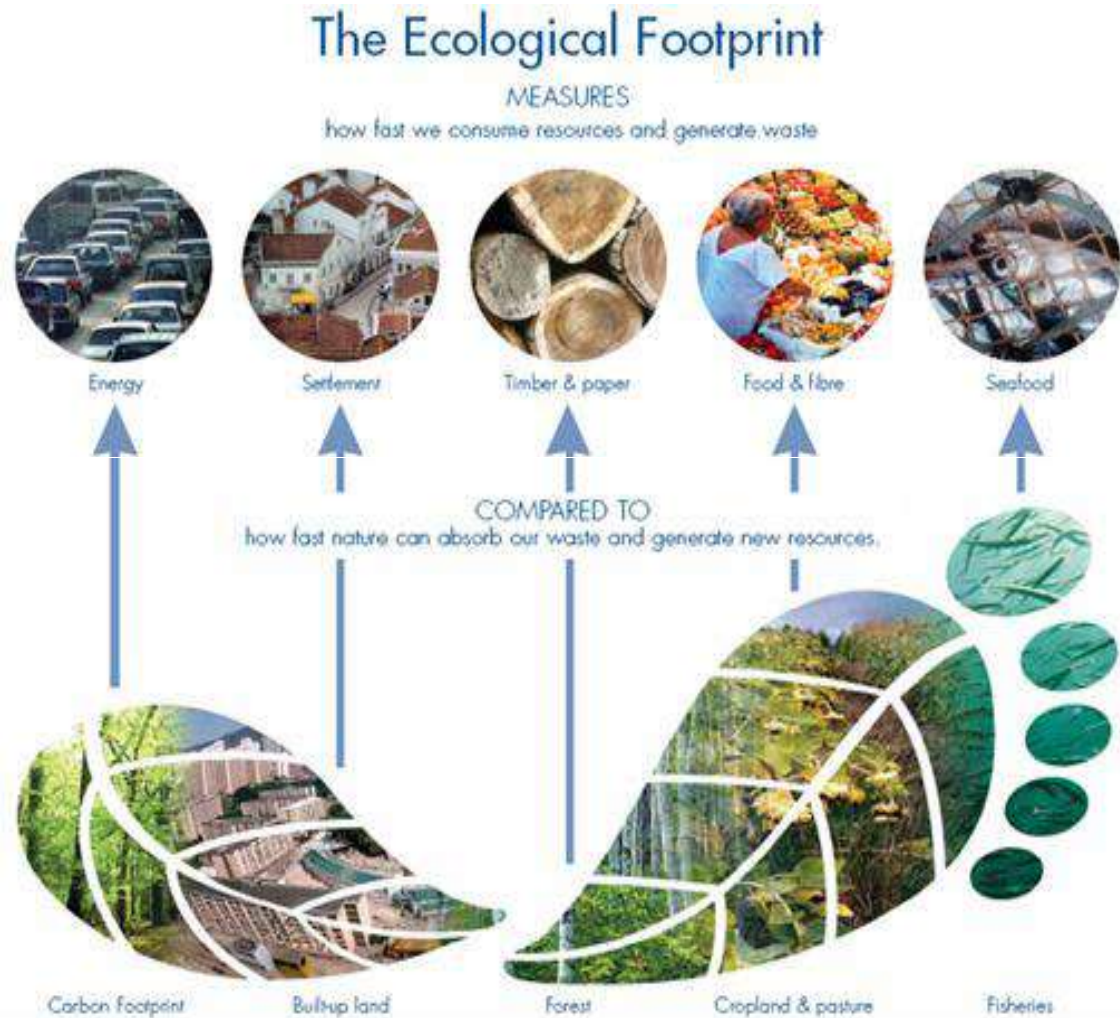


*Sustainable development which meets the need of the present without compromising the ability of future generations to meet their own needs.*

- World Commission on Environment and Development, 1987

# Ecological Footprint

- Measures human demand on nature.
- Human activities
  - consume resources
  - produce waste
- With growing populations and global consumption does nature have the capacity to meet our demands?



[www.footprintnetwork.org](http://www.footprintnetwork.org)



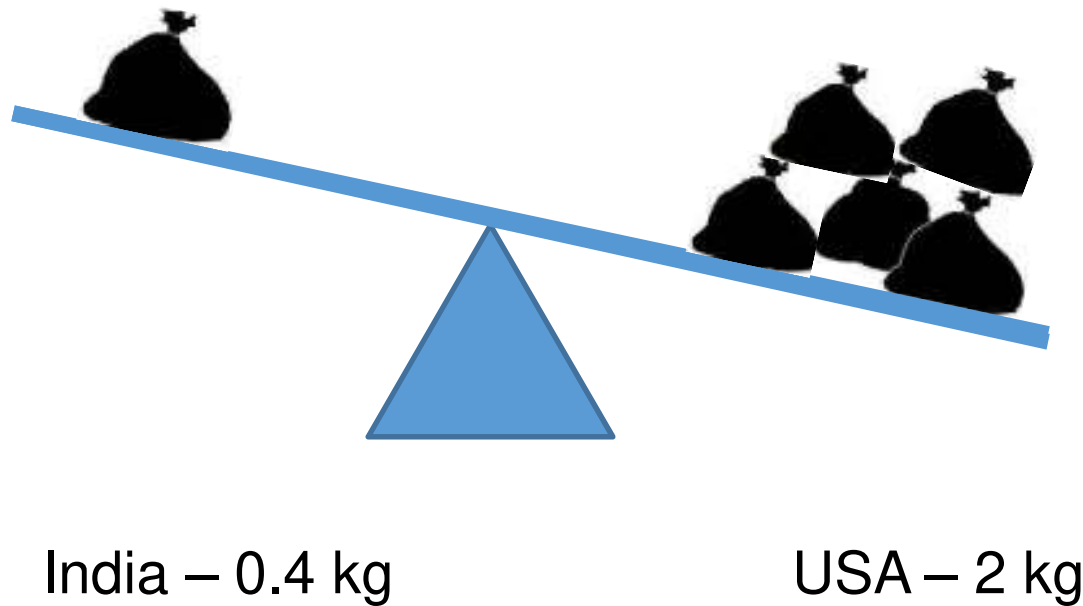


---

## One week Consumption: US and India



# Per Capita Waste Generation



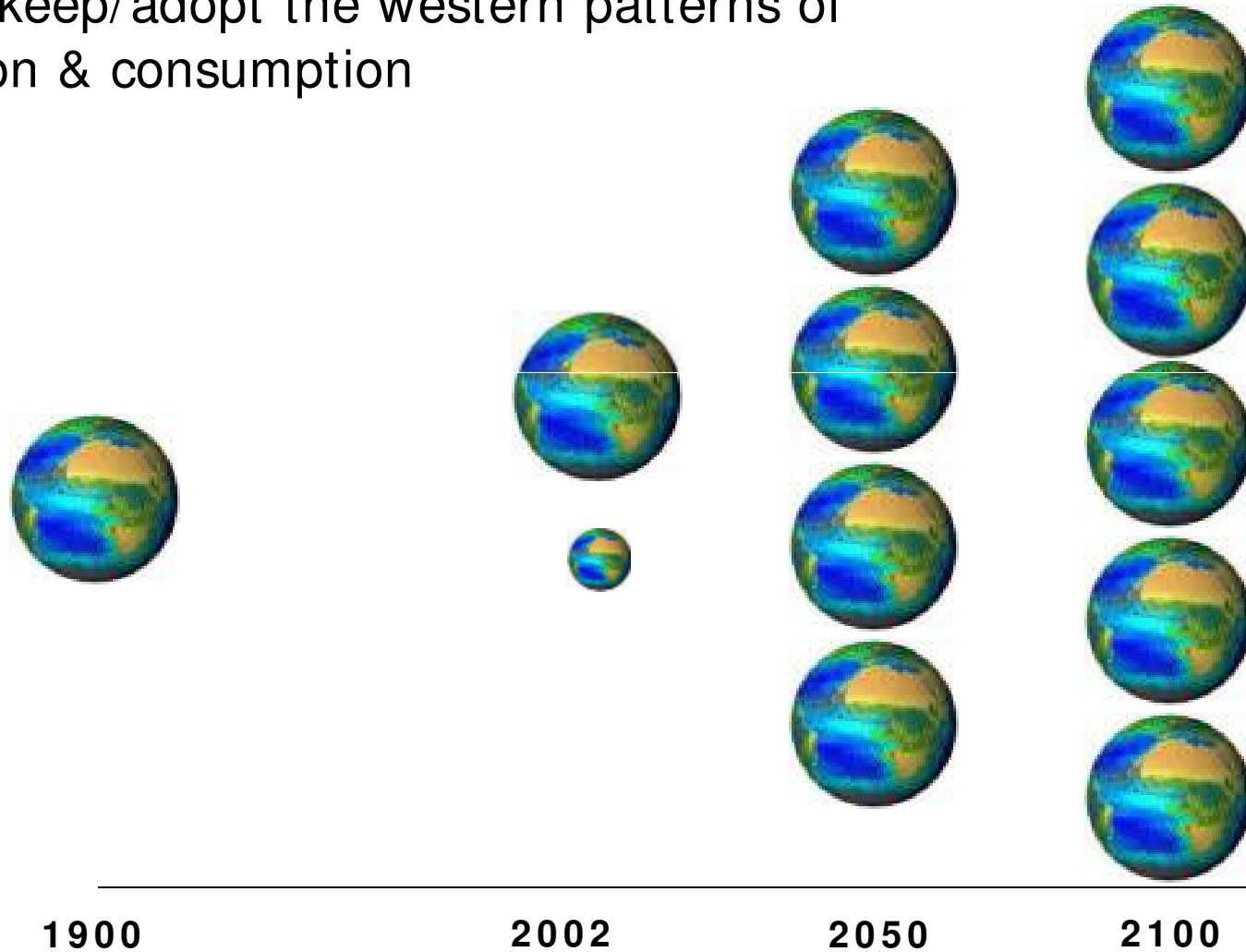
Solid waste per day per person for 2017

Source - World Scientific News 66 (2017) 56-74

Center for Sustainable Systems, University of Michigan. 2017. "Municipal Solid Waste Factsheet." Pub. No. CSS04-15.

## 4 planets needed by 2050

If we all keep/adopt the western patterns of production & consumption



# SUSTAINABLE DEVELOPMENT GOALS



# Three Dimensions and 5 Ps



# Handprint

---

- Stands for **positive and tangible action** and commitment towards sustainability
- A symbol of **caring attitude**.
- Extending a **helping hand** for planet and life on it



Launched at the UNESCO 4<sup>th</sup> International Conference on EE, Ahmedabad, 2007.

Handprint is a tool to indicate to ourselves the ESD actions we take.

Measures action at the individual, community, national and global level.

This concept emerged from one of CEE's programmes in Andhra Pradesh

<http://www.handprint.in>

## Be the Change

---

- It is individual and collective actions to solve the environmental problems with a belief that we can make a difference.
- Simple way to communicate to children participating in various environmental education programmes/ activities and help them assess what they are doing for the environment.
- Stands for the promise for action – the very act of marking your Handprint is affirmative.



# Waste Management



- Waste is everywhere around us.
- It is so evident that we have stopped noticing it.
- Over 62 million tonnes of waste is generated every year
- The impact of waste is now clearly visible on our environment, society and even on our economy.





## Objectives of EcoWaM

---

Learner understand, know and able to:

- the concepts that there is no 'waste' in nature
- waste generated by humans can also be a 'resource'
- quantity, quality and impact of waste
- show respect and empathy to the people managing waste
- reflect critically on their own lifestyle
- plan, implement and evaluate waste management activities at school and home



# Understanding Waste Management



**Waste and Nature**



**Waste - A Problem**



**Waste and Sustainability**



**Waste Management**

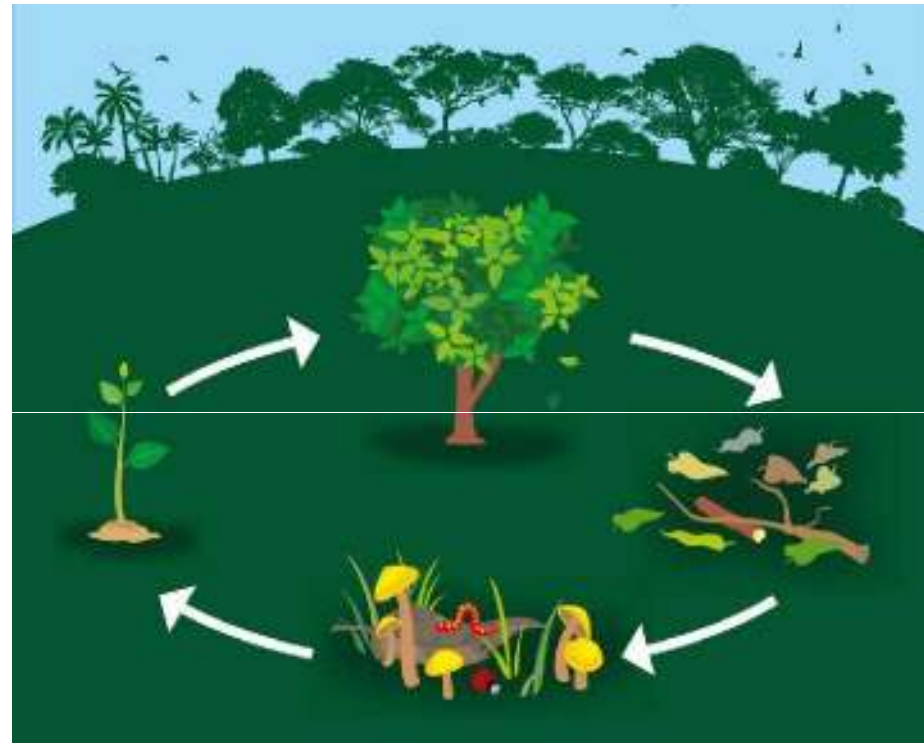


**Waste and Handprint**

# Waste and Nature



- Nature is the ultimate recycler, any waste generated by one organism becomes a useful input to another.
- With the creation of synthetic materials, humans have broken the natural, cyclical harmony.



Aimed at sensitizing students that they get everything from nature and only humans create waste.

## Waste – A Problem



- Waste when disposed off in the wrong way adversely affects the natural resources, is an environmental and health hazard, and is a nuisance.
- Waste leads to air, soil, surface and groundwater pollution resulting in wastage of precious natural resources.



Help students identify and analyze quantity, quality and impact of waste.

# Waste and Sustainability



- All humans need to consume natural resources to survive and world has only a limited supply of it
- By following the 5Rs we can reduce the amount of waste generated and also turn waste into a resource.



Helps students to analyze their own life styles and waste management issues from sustainability and circular economy perspectives.

# Waste Management



- Waste is a problem because we do not manage the waste we create.
- There is no single, simple solution to managing the many kinds of waste.
- What is needed is a sustainable waste management system for our houses, institutions and cities.



Guide students and teachers to prepare action plan which could be adopted to manage waste around them.

# Waste and Handprint



- The Footprint and the Handprint are two complementary concepts.
- It helps to find ways to lead a sustainable lifestyle and contribute towards a sustainable society and planet.



Guide students to explore handprint action ideas, which can be implemented at their school, home and community level and very importantly at individual level.

# Session 3

## How to Conduct Activities?





# Teachers Resource

---


- Teachers Module provides
  - Lesson plans on all five sub themes
  - Hands on experiential and inquiry based learning for students
  - Curriculum linkages with different subjects
  - Opportunity to build competencies like
    - critical reflection and systemic future thinking, self awareness, integrated problem solving
    - Skills like observation, data handling, analysis, interpretation and representation.
  - Guidance to enable students to document their work and experiences of taking action.

# Eco-Schools Seven Step Methodology



# Step 1 Form an Eco Committee

- Composition of the eco committee (around 20-25 members)
  - Students members – 2 students each from classes 6-8
  - EcoWaM Teacher in charge and 2-3 teachers
  - Principal or nominated member from school management
  - 5-6 Parent members
  - Social media in charge or Invitee members



**Delhi Public School, Bangalore - East**  
Affiliation No. 830294

**ECO SCHOOL PROGRAMME  
COMMITTEE MEMBERS**

Members	Role	Time dedicated towards ECO club
Mrs. Manjia Carvalho Mrs. Priti Soora Mrs. Shilpi Gupta	Head – Eco School Program Co-ordinator - Eco School program	1 hr per day Whats app group of teachers is formed for the ECO program and teachers update their work and pictures on the group as evidence. Teachers also keep updating their reports to in-charges and co-ordinators through mail
Mrs. Anjali Kumar Mrs. Tara Mittal	In-charge - Healthy Living Theme	2.5 hrs per week
Mrs. Shweta Gupta Mrs. Madhuri Verma	In-charge - Waste management Theme	
Mrs. Aparna Raju Mrs. Vandana Dahale	In-charge of Energy Theme	
Mr. Manish Chugh	Estate Manager	1 hr per week Takes care of requirement of the Club on daily basis Gardener reports to him
Mrs. Lata Mr. Lakshimpati	House Keeping staff	1 hr per day to collect segregated waste and to monitor if waste is reaching to correct destination
Mr. Sajjad Ahmad	Canteen Head	Monitoring if wet and dry waste is segregating in canteen for 0.5 hr per day
Mr. Chinappa	Gardener	4 hrs once in 15 days

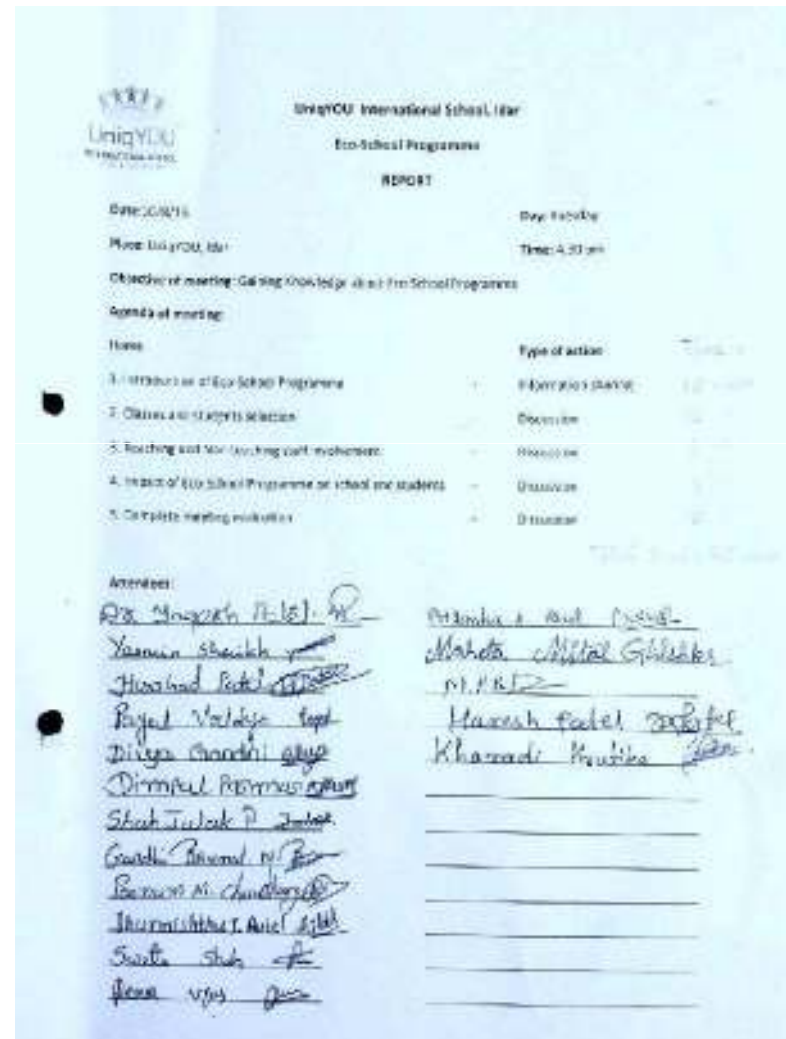
Principal  
DELHI PUBLIC SCHOOL  
Bangalore - East

Survey # 43/18 N 45 Spillkurze 9/1age, Dammarastra Post, Serjapur Road, Bangalore East - 562 125 Karnataka India  
Tel.: 2782 2260 / 81 / 63 Fax.: 2782 2597 E-mail: [west@dpbangalore.net](mailto:west@dpbangalore.net) [www.dpbangalore.net](http://www.dpbangalore.net) / [www.dpsbe.com](http://www.dpsbe.com)

Regd. Office : # 3/2, 4th Floor, Al-Ansari Apartments, Pattanna Temple Street, Basavanagudi, Bangalore - 560 004  
Tel.: 2657 0314 / 46 Fax.: 2657 2787

# Role of Eco-School committee

- Provides leadership to the EcoWaM initiative and establish link between students, teachers, senior management, parents and the entire school community
- Ensures entire school knows about EcoWaM programme and provides regular updates
- Develops, implements and monitors the EcoWaM activities taken up by team of teachers and students
- Provides guidance to the programme through regular meetings (fortnightly)
- Provides help to document the progress of work as part of the programme



## Step 2 Conduct an Environmental Review

---



**Timeline**  
Around 20-25 days required

# Waste Detectives

- To help students identify and classify types of waste generated in their home
- Ask students from the team to conduct waste audit at their home.
- Record data for a weeks period.
- Now ask students to analyze and interpret from waste audit survey.
- Document and share their findings from survey.

Type of wastes*	Source of Waste	Quantity of Waste							Total quantity of Waste
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Paper									
Kitchen waste									
Plastic									
Glass									
E-waste									
Domestic Hazardous waste									
Medical waste									

# Segregation Game

- To understand waste categorization.
- To learn skills of waste segregation at individual level and practice it at household level.
- Pick any 10-15 items from the waste audit survey.
- Now conduct discussion with students which item will go in which category and why.
- Ask students to initiate discussion with parents to start waste segregation at home.



# Litter Behaviour Survey

- Ask students to visit a nearby park or playground near their houses.
- An adult family member can accompany them for the survey.
- Collect information using litter survey questionnaire.
- Ask students to make observation and also speak to few visitors about littering problem.
- Conduct data analysis of the survey.
- Encourage students to write a simple story/ essay/ create a comic strip about littering and its impact on the environment.





# Packaging Problem

- Ask students to review various products being purchased by their parents from different sources such as street vendor, local grocery store, super market, online etc.
- Ask them to select any 6 products where they can select three each with maximum and minimum packaging to fill in the survey sheet.
- Now ask them to pick up any one product to develop plan for its repackaging design.

Name of the product	Purchased from street vendor/local grocery shop/super market/online	Packaging material used	Is the packaging minimal or excessive?	If excessive, how can the packaging be reduced?

# Interviews

---

- Two interviews to be conducted
  - Safai Mitra: To understand their role in waste sector related to collection, disposal and recycling of waste
  - Parents/Grand Parents: To know about some of the traditional practices on sustainable living they followed during their childhood and early years.
- Guide students to prepare a questionnaire with key questions for the interview (refer to sample interview questionnaire).
- After interview they can write a short report on their findings.



## Step 3 Link to Curriculum

- Introduce various concepts linked to waste management by connecting existing lessons across subjects (science, social science, language, computer science, maths etc.)
- Following concepts are suggested to cover:
  - What is waste?
  - Nutrient cycle (no waste in nature)
  - Types of Waste and what happens to waste
  - 5 Rs of Waste Management
  - Sustainable consumption
  - Sustainable Development Goals
  - Handprint

### Approaches and Tools



## Step 4 Make an Action Plan

---

- Initiate discussion in the students team based on findings
- Involve parents for their inputs
- Prepare a Reduce-Reuse-Recycle Action Plan for becoming 'Handprint Waste Wise Home'



**Timeline**  
Around 2 months

# Handprint Action at Home

---

- Suggestions for Handprint action projects are:
  - Segregate waste and Compost organic waste (Reduce)
  - Identify waste items at home to make new products
    - vertical gardening using water bottles, handmade paper, cloth bags from old clothes (Reuse)
  - Collect items for selling it to recycler or donate items (Recycle)
- Eco Friendly Diwali celebration
  - best out of waste as gifts, make your own eco friendly reusable decorations, diyas, gift wrappings, shopping bags, natural rangoli colours etc.
- Covid 19 Measures
  - Homemade cloth masks, homemade soap and sanitizer



## Step 5 Monitor and Evaluate

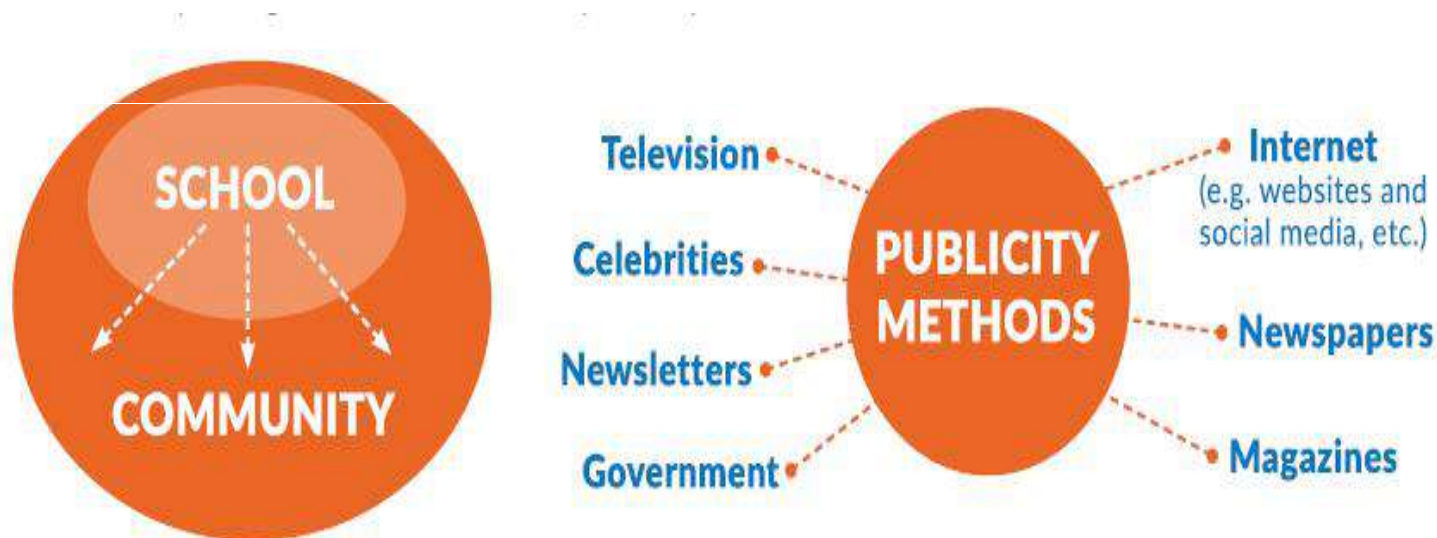
---

- This step helps in:
  - Understanding whether the waste management actions are being successful
  - Targets set in the action plan are progressing well
  - Monitor and evaluate outcomes of actions to assess success and also to identify changes required
- Regular progress review meetings will help in this direction.



## Step 6 Inform and Involve

- For keeping everyone at school and community informed about various actions being taken by EcoWaM team related to waste management.
- Following means of communication could be used to share information and involvement:



Schools, teachers, student and parent's social media platform could be used to spread the message about activities.

Tag # EcoschoolsIndia # EcoWaM # Bestsellerfoundation # CEEIndia # FEE



## Step 7 Produce an Eco Charter

- Eco Charter is a mission statement, which clearly state's the school's/EcoWaM teams commitment to improve its environmental performance in the area of waste management.
- The eco charter statement is required to be displayed creatively in various places across the school so as to familiarize all students and other staffs.
- Students can discuss a eco charter for their own home based on their handprint action.



# Session 4

## Documentation and Report Submission



## Report and Documentation

---

- Fill in the Handprint Flag application for submission of school report.
- Following aspects needs to be documented for the report:
  - ✓ **Step 1** Eco committee Formation on school letterhead with the list of committee members and Minutes of Meeting and Photos
  - ✓ **Step 2** Filled survey sheets, data, charts, photos/videos findings students notes, creative expression etc.
  - ✓ **Step 3** Examples of curriculum linkage, insights, teaching tools used
  - ✓ **Step 4** Action plan for each home; photos of activities and products
  - ✓ **Step 5** Results of activities at home for SWM, Feedback from parents
  - ✓ **Step 6** Evidence of sharing of information about activities
  - ✓ **Step 7** Display photos, Notes or videos on Overall experience of students and parents

## Evaluation

---

- Assessment criteria has been defined with indicators which will help schools to plan and self assess their work.
- For each of the steps, points/scores will be awarded to schools on the basis of EcoWaM Handprint flag application report submitted by school.
- Based on the scores, schools will be evaluated at national level.



# Report Submission

---

- Submission of consolidated report in the Handprint Flag Application format.
- Application format is available for compilation of activity report.
- Report can be submitted in Hard copy or Soft copy (as word file or pdf)
- Email or courier your report to us by 31 January 2021.
- For any query, please feel free to contact us on Paryavaran Saathi Toll free number 1800 1027 014; or email us on: [ecoschools@ceeindia.org](mailto:ecoschools@ceeindia.org)
- Eco Schools website [www.ecoschools.in/EcoWaM](http://www.ecoschools.in/EcoWaM)

**CEE**

Centre for Environment Education

[www.ceeindia.org](http://www.ceeindia.org)



[www.paryavaranmitra.in](http://www.paryavaranmitra.in)

---

**Increase your Handprint !**  
**Decrease your Footprint!**

