



## Lesson Plans for Teachers



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## **About CEE**

Centre for Environment Education (CEE) was established in August 1984 as a Centre of Excellence supported by the Ministry of Environment and Forests, Government of India. CEE develops innovative programmes, educational material and builds capacity in the field of education and communication for sustainable development.

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# Introduction

Litter Less Campaign is a joint initiative of the Wrigley Company Foundation and Foundation for Environmental Education (FEE). Litter Less Campaign is being implemented through the Eco-Schools (ES) and/or Young Reporters for the Environment (YRE) programme. The Campaign aims to engage and educate children and young people on the issue of litter, and encourage them to make positive choices. It aims to reduce litter and affect long-term behaviour change amongst youth globally.

- **Eco-Schools** is a global sustainable schools programme – it starts in the classroom and expands to the community by engaging the next generation in action-based learning.
- **Young Reporters for the Environment (YRE)** aims to empower young people to take a stand on environmental issues they feel strongly about and to give them a platform to articulate these issues through the media of writing, photography or video.

In order to reduce litter and affect long-term behaviour change, an attempt has been made to create a set of Lesson Plans. The Lesson Plans in this document have been developed to enable teachers to guide classroom and outdoor learning on the wider challenge of litter and its linkages with our life styles. Lesson Plans have been developed with the following objectives:

- To raise awareness about litter and waste and its effect on the local environment and wider community.
- To increase students knowledge and change attitudes for preventing and managing litter and waste.
- To influence students' behaviour in preventing and managing litter and waste.
- To promote and improve waste management in schools and student's sphere of influence.
- To assess the waste literacy of students.
- To enable students to disseminate and exchange examples of work achieved in the context of litter and waste management.

## **Lesson plans have been organised/ categorised**

1. under different strands and substrands.
2. with clear indication of the different learning outcomes which will be achieved through individual lesson plans.
3. based on methodology of two programmes: Eco-Schools and YRE.
4. age groups (for Eco-Schools 6-8, 9-12 and 13-16 and for YRE 11-14 and 15-18 years).
5. with appropriate SDG linkages suitable to the particular strand.

## **What the lesson plans help achieve?**

These lesson plans have been compiled with the intention to enable teachers to guide students systematically and bring about litter and waste related learning and change in schools and the community through meticulous planning, innovative design and action.

### Lesson Plans build in

1. hands on experiential and inquiry based learning for students.
2. curriculum linkages with different subjects , especially in case of lesson plans developed for the Eco-Schools programme.
3. ESD competencies - critical reflection and systemic future thinking, self awareness, integrated problem solving to name a few (Education for Sustainable Development Goals, Learning Objectives.  
<http://unesdoc.unesco.org/images/0024/002474/247444e.pdf>)
4. provides opportunities for skill building including observation, data handling, analysis, interpretation and representation.
5. opportunities for building global citizenship by providing ideas for exchange of learning as part of the twinning programme.
6. capacities and leadership qualities.
7. confidence by enabling students to report and take action on issues of immediate concern, especially exposure to different types of methodology for capturing and reporting issues, specifically as part of the lesson plans developed for the YRE programme.
8. opportunities to promote international collaboration through the exchange of work - would help strengthen the Eco-Schools twinning opportunities.

The lesson thematic strand begins with **Before you Begin** section that provides the teacher with the basic information required to deal with the issue and have meaningful discussions with the students. A teacher might not have all the information required and **References/Further Readings** have been provided at the end of each thematic strand that lists resources in print, websites and videos used for developing the lesson plans and it can be used to get more details of the issue.

**Title**  
Describes the lesson plan.

**Introduction**  
Provides a brief insight into the lesson plan and also mentions the methodology that the particular lesson plan has adopted, for example learning processes could include hands on engagement, classroom interaction, group work, analysis of responses and communicating about the topic through an article, a facebook post, and/or video to name a few.

**Curriculum Linkages**  
These have been specified in lesson plans pertaining to the ES and YRE programme and mention the different subjects like Science, Global Citizenship, etc to which linkages can be drawn by the teachers.

**Programme and Age Group**  
This indicates the programme - Eco School/YRE for which the lesson plan is recommended. It also mentions the age group for the programme is suitable.

**SDG linkages**  
The symbol indicates the linkage of the issue with the particular SDG Goals.

**Objectives**  
What is intended to be achieved as part of the lesson plan is specified here.

**Duration**  
Lesson Plans range in duration from a few minutes to a couple of days. Duration has been specified in every lesson plan to help teachers' allocate time and plan the same.

**Resources Required**  
Lists various resources including material, online resources, internet, worksheets, etc which will be required for conducting the lesson.

**Activity**  
Implementation of the lesson plan has been divided based on the duration of engagement into classroom sessions and/ or group assignments. Classroom session: These are learning processes within a classroom set up and have largely looked at a duration of 45 minutes for any one session Group/Individual Assignment: These are generally longer duration learning process and could be achieved over a few hours to a few weeks. These are learning processes which involve group interactions, mostly based beyond classroom set-up, sometime restricted to within the school and sometimes beyond the school.

**Evaluation**  
It is important to understand whether students have achieved the learning intent. Different techniques have been suggested in different lesson plans.

The image displays two sample lesson plan forms. The top form is titled 'Lesson Plan 2' and features a blue header. It includes sections for 'Introduction', 'YRE steps', 'Curriculum Linkage', 'SDG Linkage', 'Objective', 'Time required/ Duration', and 'Resources Required'. The bottom form is also titled 'Lesson Plan 2' but has an orange header. It includes sections for 'Activity', 'Classroom 1 session', 'Home Assignment', 'Classroom 2 session', and 'Evaluation'. Red arrows point from descriptive text blocks to specific fields on these forms: 'Title' points to the header; 'Introduction' points to the 'Introduction' section; 'Curriculum Linkages' points to the 'Curriculum Linkage' field; 'Programme and Age Group' points to the '15-18 Years' icon; 'SDG linkages' points to the '12 economic, social, and environmental' icon; 'Objectives' points to the 'Objective' section; 'Duration' points to the 'Time required/ Duration' field; 'Resources Required' points to the 'Resources Required' section; 'Activity' points to the 'Activity' section; and 'Evaluation' points to the 'Evaluation' section. The forms also feature icons for 'Eco-Schools', '15-18 Years', and '12 economic, social, and environmental'.

# SDG and its relation to the problem of Litter!

'Transforming My World: The 2030 Agenda for Sustainable Development' was adopted at the UN Sustainable Development Summit in 2015. The new framework was developed following the United Nations Conference in June 2012 organized at Brazil. The agenda contains 17 goals with 169 targets covering a broad range of sustainable development issues. The goals and targets demonstrate the scale and ambition of this new universal and global agenda to plan the course of action for the people, the planet and prosperity. It is expected that all countries and stakeholders, acting in collaborative partnership, will implement this plan and contribute in achievements of the targets. The Goals aim to secure a sustainable, peaceful, prosperous and equitable life on Earth for everyone now and in the future. The Goals are linked to each other or interdependent in one or the other ways. The achievement of the agenda needs to realise the links and plan our actions accordingly. Some of the linkages are direct and obvious to see but many are not. A brief is given below to explain the linkages of the problem of littering and litter waste with various SDGs. The brief is not exhaustive but is just indicative. During the transaction of lessons, encourage students to share other plausible linkages.

## Sustainable Development Goal

## Linkages with the problem of Litter

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End poverty in all its forms everywhere

The littering behaviour and waste as such do not have direct linkages but it has been observed that people who are collecting and handling the litter and waste are generally from poorer communities in developing countries and are vulnerable to hazards associated with them.

Also, the impact of littered wastes is most on the poor communities as they are directly dependent on the natural resources to meet their food requirement.



End hunger, achieve food security and improved nutrition and promote sustainable agriculture

The irresponsible behaviour and ways of managing waste is polluting the land, air and water. Plastics littered around are killing various life forms especially in oceans; micro plastics have entered the food chain and are impacting the quality and quantity of food.





Ensure healthy lives and promote well-being for all at all ages

Need for sustainable management of waste , especially that are hazardous in nature and remain in our ecosystem by polluting air, water and soil. Also, the improperly disposed waste leads to contamination, and aids the growth of harmful pests.



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

The target 4.7 explicitly recognizes the role of Education for Sustainable Development along with Global Citizenship in addressing the issues of sustainability like litter and associated behaviour.



Achieve gender equality and empower all women and girls

In developing and least developed countries, it is usually the women and young girls who are collecting littered waste. These women are often not recognised for the role they play in recycling of waste. Absence of safety equipments and practices makes them vulnerable to injuries and diseases.



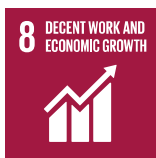
Ensure availability and sustainable management of water and sanitation for all

One of the major reasons of contamination of our water resources is dumping and other unsafe ways of dealing with waste, especially hazardous waste. By putting an end to these practices, we can make 'clean and safe water for all' a reality.



Ensure access to affordable, reliable, sustainable and modern energy for all

'Waste to Energy' is becoming a major component of energy mix. This requires proper segregation and channelization of waste that can be used as fuel. Efficient segregation will reduce the pollution load, as it will ensure better combustion. Additionally efficient segregation will also remove materials that release hazardous gases under certain conditions.



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Resource recovery from waste and recycling are major sustainability strategies that depend largely on waste management systems and behaviours. This is emerging as a major sector of the economy. The health of workers handling different stages of the system and pollution reduction in the process are important concerns.



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Facilitation of sustainable and resilient infrastructure in the context of waste is an important element with cradle to cradle approach. 'Circular Economy' has been looked as one of the important aspects which emphasises on preventing products and materials from becoming waste for as long as possible and turning waste that cannot be avoided into a resource. This can boost growth, create jobs, help reduce greenhouse gas emissions and reduce dependency on imported raw materials.



Reduce inequality within and among countries

The inequality is reflected in the production and consumption behaviours. Waste and litter increases due to inadequate and inefficient collection and treatment systems. The production and consumption behaviours, also a product of inequity and cultures, has an impact on the amount of waste. International trading in waste has negative environmental impacts on developing and poorer nations. Also those involved in the recycling of this waste are the poor and vulnerable.



Make cities and human settlement inclusive, safe, resilient and sustainable

Waste management is vital to any functional urban environment. The safe removal and management of solid waste represents one of the most vital urban environmental services. Uncollected and unsegregated solid waste blocks drains, causes flooding and may lead to the spread of water-borne diseases.



Ensure sustainable consumption and production patterns

The goal looks at efficient use and management of natural resources, environmental impacts like waste management, education of consumer information and education for sustainable development. One of the specific targets of this goal is to reduce per capita food waste by 50 percent. Environmentally sound management of chemicals and wastes, and waste minimization & waste recovery are important aspects of sustainable development.



Take urgent action to combat climate change and its impacts

Everyone has a part to play when it comes to climate change as proper waste management can reduce greenhouse gas emissions. Waste is a resource if properly managed and recycled and can reduce the demand of energy and virgin materials.



Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Littering and improper waste management harms other life on earth and in the seas. Marine pollution is an alarming issue majorly contributed by waste due to its persistence, complexity and steady growth. It has started impacting the aquatic food chain with microplastics entering human food chain. Major cause of impact to marine life, are due to entanglement and starvation (caused after consuming plastics).



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Littered waste is an hazard to various animals that mistake it for food. Litter also pollutes the land and chokes the soil that impacts the terrestrial flora and fauna.



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

Impact of litter and waste on health of different societies and life forms is an important dimension of Peace and inclusiveness.



Partnerships for the Goal - Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Litter and waste has to be seen as a global problem. The waste dumped in oceans does not have any boundary and impacts all!. The problem requires partnerships for capacity building to change of behaviour, have infrastructure in place for waste management, ensure practices which promote reuse and circular economy and right technology.