



### GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI DIRECTORATE OF EDUCATION: INCLUSIVE EDUCATION BRANCH AMRITA SHERGIL SCHOOL BUILDING BEHIND LADY SHRI RAM COLLEGE, LAJPAT NAGAR-IV, NEW DELHI-110024

No. F.253/DDE(IEB)/Admn.Cell/2022/4096-4/04

Dated: 04/05/2023

#### **CIRCULAR**

### Sub: Plastic Pollution and Challenge Activities of Tide Turners Plastic Challenge 2023 under UN-Environment Program (UNEP) for Govt., Govt. Aided & Private Unaided Recognized Schools.

This is in continuation to Circular No. F.253/DDE(IEB)/Admn.Cell/2022/3942-3949 dated 28.04.23 wherein instructions were laid for participants of Govt., Govt. Aided & Private Unaided Recognized Schools to attend Master Training on Plastic Pollution and Challenge Activities of Tide Turners Plastic Challenge 2023 under UN-Environment Program (UNEP) through virtual mode.

In line of the same, school participants are expected to go through 03 level of challenges namely:

- 1) Entry level (Knowledge Building): To conduct Plastic Literacy Test with students which will act as a qualifying test for entry level. The test will determine the knowledge level of participants with regards to plastics and examine their attitude and daily practice with respect to plastic use.
- 2) Leader level (Community Outreach and Awareness): Task set for the school is to organize a Plastic Awareness Week and reach out to their school mates/parents and the neighborhood community. Suggestion and ideas are given in the tool kit which is designed to nudge community to change behavior in terms of consumption of plastic products.
- 3) Champion Level (Promoting Advocacy and Ground Level Solutions): To initiate ground level changes and implement solutions such as-
  - Action on ground to review the local water bodies/common public spaces.
  - Youth to conduct a Plastic Waste collection drive.
  - Ensuring collected plastic is recycled by connecting with authorities and recyclers.
  - Setting up a waste segregation system within school/neighborhood community etc.

Regarding this, UNEP has provided following resources for carrying out the challenge activities with the students:

- 1. Question Paper and answer key of the **Plastic Literacy Test** attached at **Annexure-I**
- 2. Tide Turner Toolkit attached at Annexure-II

orange

For addressing queries regarding the challenge and guiding through the challenge process, UNEP shall organize virtual meeting scheduled on **every Friday in the month of May 2023**. Eco-Club In-charges/TTC In-charges and Assistant TTC In-charges may join the virtual meeting as per below mentioned details:

### **TTC Reporting Orientation: Delhi**

Date: Every Friday in the Month of May 2023 (05.05.23, 12.05.23, 19.05.23 and 26.05.23)

Time: 4:30pm – 5:30pm

Video call link (Google Meet): https://meet.google.com/uxi-gymv-pat

All HoS are requested to ensure that 03 level of challenges are completed as per given timeline:

- 1) Entry Level and Leader Level activities by 10<sup>th</sup> May 2023.
- Champion Level activities and submission of impact report by individual schools on TTC website (<u>https://tide-turners.org/Index</u>) with details of school participation by 27<sup>th</sup> May 2023.

All DDE (Districts)/(Zones) are requested to ensure that participants from all Govt., Govt. Aided & Private Unaided Recognized Schools of DoE under their respective jurisdiction actively participate in TTC challenge activities and submit report within desired timeline.

This issue with the prior approval of the Competent Authority.

071000

(O.L. GANGAR) SECTION OFFICER (IEB)

Dated: 04/05/2023

### No. F.253/DDE(IEB)/Admn.Cell/2022/ 4096-4104 Copy to:

- 1. Ms. Gayatri Raghwa, Senior Environment Education Consultant, UNEP
- 2. P S to Secretary (Education), GNCTD
- 3. P S to Director (Education), GNCTD
- 4. PA to JDE(IEB), DoE, GNCTD
- 5. All DDE (Districts) of DOE
- 6. All DDE (Zone) of DOE
- 7. All Concerned HoS
- 8. OS (IT) for uploading order of the department website
- 9. Guard file

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(O.L. GANGAR) SECTION OFFICER (IEB)

Annexure-I

# TIDE TURNER PLASTIC CHALLENGE

Plastic literacy test (10-marks)

### Knowledge (6 marks)

- 1. Which of the following is not SUP?
  - a. Plastic Straws
  - b. Plastic Bags
  - c. Plastic Toothbrush 🔍
  - d. Plastic Water bottle
- 2. According to an estimate, by 2050 there will be more plastic in the oceans than thereare......
  - a. Plankton
  - b. Fish
  - c. Turtle
  - d. Dolphin
- 3. Plastics slowly break down into smaller pieces known as 'Micro plastics' which are .....in diameter which can enter into our food chain and can be harmful.
  - a. Less than 10 mm
  - b. Less than 1 mm
  - c. Less than 5 mm
  - d. Less than 7 mm

4. In India, certain types of SUPs have been banned from 1st July 2022, which amongthese SUPs

#### has not been banned?

- a. Food cutleries
- b. Wrapping and packaging material
- c. PVC banners less than 100 microns
- d. Poly bags above 75 microns



5. When reuse of discarded material is done to create a product of higher quality orvalue than

the original, it is known as?

- a. Recycle
- b. Upcycle
- c. Circular
- d. Reuse
- 6. As an individual which alternatives will you adopt in place of SUPs:



### Attitude (2 marks)

- 7. What could be the best solution to deal with SUPs? (You are allowed to mark only one)
  - a. By recycling them
  - b. By refusing its use where alternatives are available
  - c. By reducing its use
- 8. I am conscious about refusing SUPs in my daily life but it is difficult to convince myfamily and friends because they
  - a. do not understand the impact of plastic pollution
  - b. do not want to change their behaviour
  - c. do not find alternatives which are convenient and cost effective

### **Practice (2 marks)**

- 9. I prefer reusing plastic bags or containers before disposing of them ....
  - a. Always
  - b. Sometimes
  - c. I do not
- 10. I segregate and collect plastic waste at my home to give it to the recycler....
  - a. Always
  - b. Sometimes
  - c. I do not

# TIDE TURNER PLASTIC CHALLENGE

## PLASTIC LITERACY TEST FOR GROUP (10-MARKS)

### **ANSWER KEY**

### Knowledge (6 marks)

- 1. Which of the following is not SUP?
  - Plastic Toothbrush
- 2. According to an estimate, by 2050 there will be more plastic in the oceans than thereare......
  - Fish
- 3. Plastics slowly break down into smaller pieces known as 'Micro plastics' which are .....in diameter which can enter into our food chain and can be harmful.
  - Less than 5 mm
- 4. In India, certain types of SUPs have been banned from 1st July 2022, which amongthese SUPs has not been banned?
  - Poly bags above 75 microns
- 5. When reuse of discarded material is done to create a product of higher quality orvalue than the original, it is known as?
  - Circular
- 6. As an individual which alternatives will you adopt in place of SUPs:
  - A-4
  - B 3
  - C 2
  - D-1



### Attitude (2 marks)

- 7. What could be the best solution to deal with SUPs? (You are allowed to mark only one)
  - a. By recycling them (0)
  - b. By refusing its use where alternatives are available (1)
  - c. By reducing its use (0.5)
- 8. I am conscious about refusing SUPs in my daily life but it is difficult to convince myfamily and friends because they
  - a. do not understand the impact of plastic pollution (0.5)
  - b. do not want to change their behavior (0)
  - c. do not find alternatives which are convenient and cost effective (1)

## Practice (2 marks)

- 9. I prefer reusing plastic bags or containers before disposing of them ....
  - a. Always (1)
  - b. Sometimes (0.5)
  - c. I do not (0)
- 10. I segregate and collect plastic waste at my home to give it to the recycler....
  - a. Always (1)
  - b. Sometimes (0.5)
  - c. I do not (0)







The Young Leaders Plastic Challenge









## Acknowledgement

UNEP's Tide Turners was adapted for India when it was introduced as a campaign in 2019. The knowledge and implementation partners, WWF India and Centre for Environment Education modified the toolkit to adapt it to the Indian context, developed campaign strategy and implemented four phases of Tide Turners Plastic Challenge during 2019-2022.

The campaign has involved over 5.25 lakh youth across India generating inspiring stories from the ground. Responding to the challenges brought about by the COVID 19 pandemic, the programme was implemented in a digital model as well. Over the years several partnerships have emerged including the national eco club programme of the Ministry of Environment, Forest and Climate Change, Bharat Scouts and Guides, National Cadet Corps (NCC), State governments and many other organizations and networks have sparked a cascading effect for the campaign on single use plastics (SUPs).



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### Foreword

Anything that sounds too good to be true probably is. Plastic is no exception. Cheap, durable, and light plastic has made its way into zevery country, every society, every lifestyle. Yes, it makes life easier in lots of ways. Who amongst us can say they've never used a plastic straw, plastic shopping bag, or plastic spoon? But here's the downside: Our production and consumption of single use and disposable (use and throw) plastics and our inability to manage plastic waste sustainably have led to a massive pollution problem. Marine litter and microplastics are flooding our oceans and is hurting marine ecosystems and human health on an unprecedented scale.

The solution does not lie at sea, though. It lies on land with us, the ones who started the problem.

From cutting back on our use of single-use disposable plastic to recycling more effectively to finding sustainable alternatives to plastic, solutions to plastic pollution are within our grasp.

In this leadership challenge, we're going to learn what those solutions are and how we can be a part of them. That's just the beginning. Then we will lay out a plan for how we can inspire others to join in the fight against plastic pollution. The final frontier will be a set of challenges that we hope could unleash a new movement for action that will seek to reduce plastic waste where it matters most: upstream.

We're fortunate to have as beautiful a place as planet earth to call home. And let's not forget, we share this home with wondrous plants and animals, all of whom are doing their part to keep the planet healthy and beautiful. Let's do our part, too. Let's keep our oceans, forests, rivers, and roads picture perfect and free of plastic pollution.

### About the challenge

The Tide Turners Plastic Challenge is a global youth movement to fight plastic pollution around the world. It is designed to inspire young adults to reflect upon their plastic consumption, discover solutions to reduce this consumption, and lead change in their homes, communities and institutions.

By joining the challenge, you will be part of an entire generation of young leaders who are changing the world, one action at a time!

There are three levels to this challenge:

#### Level 1: Enhance knowledge about single-use plastics

Think about your own consumption and what simple actions you can take to reduce single-use plastic from your day-to-day life.

#### Level 2: Spread awareness and sensitize community

Reach out to your friends, family and many more in the community to create awareness about the issue of single-use plastics and find out about the implementation of the SUP ban.

#### Level 3: Take action and lead the change

Organize clean up drive/set up a waste management system (segregate – collect – recycle) for singleuse plastics/facilitate SUP ban implementation.

#### **Process of Participation**

#### Who can participate?

The challenge is open for group and individual participation.

Group participation is for:

- Schools (Eco clubs, NCC, Scouts and Guides)
- Colleges (Youth clubs,zzzz NCC, Scouts and Guides)
- Corporates and offices
- ∎Informal groups like rural youth, differently abled, marginalized and indigenous groups.

Individual participation is for young people in the age group of 16-35 years.

#### Why participate in the challenge?

- Become part of national youth network
- Opportunity to build skills and leadership
- Make an impact with your action
- Get trained by experts
- Recognition for your efforts in the national summit
- International exposure for champions.

#### How to participate?

- Register as an individual or group on the website www.tide-turners.org
- Fill out details and select organization with whom you will associate during the challenge
- A login ID will be shared and create your password for your future login. Use a dashboard for guidelines and reporting formats
- Download toolkit and refer to the library section for additional resources.

#### BesĒ of luck for your challenge journey!

## BG

## **Background Information**

#### The problem with plastic pollution

Imagine if you could do something about ocean

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pollution, climate change, human health and floods all at once! Sounds like a job for a superhero? Actually, it could be you! And all you'd have to do is refuse, reduce, reuse and recycle plastic in your daily life and get others

to do the same. Hello, Captain No-Plastic! If that sounds weird, guess what? It gets weirder. Plastic is not only connected to ocean pollution, climate change, human health and flooding, but much, much more. Try tourism, toxic waste and turtle safety. But let's not get ahead of ourselves.

#### 1. What's the scoop on plastic?

Have you ever stopped to think about how much plastic you use? For most of us, the answer is a lot. From shampoo bottles to food packaging to toys and even clothing—a surprising amount of the stuff we encounter on a daily basis is either made of plastic or has some plastic component to it. So why did we end up using so much plastic and is it all bad?

The main problem lies with single-use plastics, or things we use just one time and then throw away. These include plastic straws, takeout containers, food wrappers, water bottles, and shopping bags. We use and toss way more single-use plastics than we need.

Don't mean to keep you up at night, but..

#### Around the world,

### **1** million

packaged drinking bottles are purchased every minute.

Every year we use up to **5 trillion** 

single-use plastic bags. What does that look like? Well, if tied together, plastic bags could be wrapped around the world seven times every hour.

50 percent of all the plastic we use is single-use. Sources : worldenvironmentday.global/en/about/beat-plasticpollution and The State of Plastics

#### What are plastics?

The word plastic derives from the Greek word plastikos meaning "capable of being shaped or molded". Plastics are organic polymers of high molecular mass and often contain other substances. They are usually synthetic and most commonly derived from petrochemicals. The first synthetic plastic invented was "Bakelite" in the year 1907 by Belgian chemist, Leo Bakeland.



#### **Two not-nice nines**

Throughout the history, humans have produced 90,00,00,00,00,000 kilos (9 billion tonnes) of plastics. How much is that? By comparison, that's approximately the weight of 8,00,00,000 Blue Whales.

The other nasty nine? Just 9 percent of this 9 billion tonnes has been recycled (turned into something reusable). Source - https://www.newsweek.com/ plastic-production-pollution-9-billion-tonsrecycling-63922

#### 2. How's the plastic hurting?

If you're scared to ask, we'll do it: If only 9 percent of plastic has been recycled, what happens to the rest of it?

This is where things get problematic. Our waste management systems don't have what it takes to contain the plastic onslaught. The plastic we throw away gets into drains, piles up on roads or open lands and gets buried under soil. What we throw also may get into our ponds, lakes, rivers and seas. A huge quantity of plastic which gets collected along with our garbage ends up in trash dumps. Many of these are right by a water body, which means trash overflows from them directly into the water body.

Landfills, which are designated sites for dumping solid waste, are not much better. As it moves to landfills, plastic litter and lighter plastic such as



polythene bags often fly off in the wind and end up around drains, from where it enters rivers and ultimately pollutes our oceans.

Studies show that 90 percent of bottled water and 83 percent of tap water contain plastic particles. Source: The State of Plastics, UNEP. Plastics are non-biodegradable, which means, unlike orange peels or bread crusts, bacteria cannot break down current generation of plastics and turn it into something which is harmless. In other words, plastic waste can take centuries to decompose, and, in the process, could leak harmful chemicals into

the soil and water. There's a silver lining, though: scientists are coming up with amazing solutions.

Instead of decomposing harmlessly, plastic slowly breaks down into smaller pieces called microplastics (measuring less than 5 mm in diameter), which are even harder to clean up.



Over the past 20 years, entrepreneurs, companies and researchers have created a huge variety of biodegradable and/or compostable plastic substitutes. Everything from edible six pack rings to grocery bags made from shellfish shells--it's all out there. Source: CleanSeas Back to School Plastic Challenge - https://bit. ly/2RBJ2qo)

#### The surprising uses of banana peels

Cartoon characters slip on them all the time. But they're good for something even more important: Insulating electric cables instead of using plastic. Who would've thought? Fortunately for us, 16-year-old Elif Bilgin from Turkey did think. She also developed her award-winning idea, not giving up even after 10 failed trials.

Learn more: https://bit.ly/1a4nr3h

zMicroplastics are extremely dangerous, as fish and other marine animals have been known to eat them. This is not cool at all, either for their health or ours, because quite often fish who ate microplastics become part of our dinner. Our daily table salt contains nano particles of plastic.

## **KNOW YOUR PLASTICS!**



## Single-use, so much to lose

 Nearly one-third of the plastic packaging we use ends up clogging our city streets and polluting our natural environment.

Every year, up to 13 million tonnes of plastic leaks into our oceans where it endangers marine wildlife. That's the same as pouring an entire garbage truck of plastic into the ocean every minute.



**By 2050** there will be more plastic in the oceans than there are fish (by weight)

Whew! That's a lot to take in. But the great part is, each and every one of us can do something to tackle plastic pollution.And we're going to start right now.

#### World Cleanup Day is a thing!

Did you know there's a day dedicated to making the world cleaner? A whole global movement comes

together to take action and do something about the waste in their backyard. Cleaning up your room might be a bore but cleaning planet earth is fun – especially when you're joining forces with millions of people in 150 countries around the world. Join the fun on 21st September



www.worldcleanupday.org https://oceanconservancy.zorg/trash-free-seas/ international-coastal-cleanup/

#### Earth needs to look #instaready too!

The beauty industry has been in the spotlight lately for its rampant use of plastics. From microplastics in facial scrubs to excessive plastic packaging to the practically indestructible facial and wet

wipes, a wide range of beauty products are wreaking havoc on the planet. We all need to choose our products more carefully—find tips in Appendix 3 of the badge. We can't be making ourselves look good while ruining the Earth's natural beauty.



Learn more at: https://www.teenvogue.com/story/the-beautyindustry-has-a-plastics-problem?verso=true.

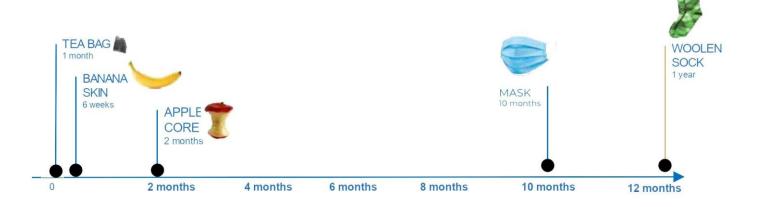


## **HOW LONG UNTIL IT'S GONE ?**

Check out decomposition timelines of some of the items that we often use.



decompose





decompose

## 

## **Challenge activities**

### LEVEL 1: Entry level

#### **GROUP ACTIVITIES**

Nominate a group member or the group coordinator: to conduct a lecture/ talk on thefacts and information frozm the toolkit. Refer to the library section on the www.tide-turners.org website.

**Conduct a plastic literacy test** by downloading the quiz from the dashboard on the website.

**Organize a classroom test** by printing the quiz or display the questions on the classroom blackboard or if you have a projector, you can screen the questions on a white wall.

**Send an invitation** to all the group members/ students to participate and attempt the pen and paper test. Evaluate the individual response sheet and voila!

How many members qualified in the plastic literacy test? (Those who have answered 50% questions correctly will qualify this level)

Now, report level 1 activities on your dashboard mentioning the number of participants who took the plastic literacy ztest. Upload photo of participation in the quiz. Move to the next level of the challenge!

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**The International Plastic Bag Free Day** is observed on July 3 annually. The day is observed to raise awareness about the grave issues of plastic pollution and the serious threat that it poses to the natural environment ranging from land to marine life. As plastic bags take around 100-500 years to decompose, it creates land pollution as it is dumped in landfills and proves hazardous to the marine animals if it gets washed into oceans. So, it becomes imperative to raise an alarm against the ill-effects of single-use plastic bags.

The campaign started by Zero Waste Europe's Bag Free World, became a global initiative to educate people on the harmful effects of plastics. The day, July 3 has been designated as the International Plastic Bag Free Day to promote the use of ecofriendly items such as paper bags or cloth bags instead of plastic bags and get rid of single-use plastic bags. Source: https://www. news18.com/news/lifestyle/international-plasticbag-free-day-2021-history-significance-quotesmessages-and-images-to-share-3919652.html)

#### **INDIVIDUAL ACTIVITIES**

**Be a bookworm** and read all the facts and information in the toolkit. Take the test and know if you have already become a plastic guru!

Take the **plastic literacy test** through your dashboard.

**Earn a 50% score** on the plastic literacy test to progress to the next level!

## **Background Information**



Before you embark on the next level of challenges, let's learn a bit more about plastic pollution.

#### Why does plastic pollution matter?

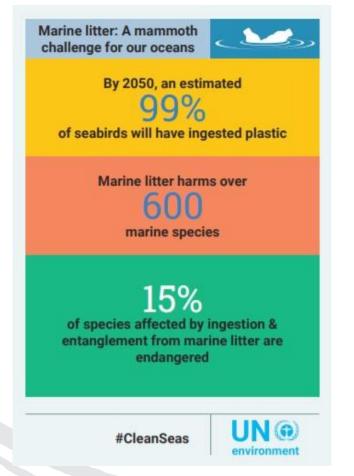
So, there's tonnes of plastic. Why is that such a big deal? Only because it hurts everyone on the planet. But don't take our word for it.

#### Six ways plastic waste hurts the planet

#### 1. Harming our marine friends

Had a bad meal lately? Ocean animals say "join the club."

Many marine animals swallow plastic items or get trapped in them and often die as a result.



Around 11.1 billion plastic items are tangled in coral reefs—blocking their oxygen and light and releasing harmful chemicals.

#### Earth wants to know what feels so heavy

The 300 million tonnes of plastic waste we produce each year, that's what. That's nearly the same as the weight of the entire human population!

Source: www.unenvironment.org/interactive/



#### 2. Spoiling our soil

Plastic waste takes its toll on land, too. Plastic from landfills leaks toxins into the soil and water, affecting the health of soil, plants, and soil dwellers like

earthworms performing essential ecosystem services. By entering the soil, plastic—you guessed it—finds its way back to us via the crops we eat.

Kicking off a new look

Spanish football team Real Madrid's new kit is made completely from ocean plastic!

While India is not a top global consumer of plastics11 Kgs (https://bit.ly/2TTDdXK) of plastic are consumed per capita compared with 110 Kgs in the U.S. it has poor rates(https://bit.ly/2LgRVI3) of waste management.

Much of the country's recycling sector is informal and unregulated, operating without government oversight. Every day, India generates 1.5 Crore Kgs (https://bit.ly/2PE9Mr6) of plastic waste of which only 90 Lakh Kgs are collected and recycled, leaving the rest to pollute water, clog drain degrade soil



rest to pollute water, clog drains, kill cows and degrade soil.

Source: https://www.huffpost.com/entry/singleuse-plastic-ban-india\_n\_5b3a09b6e4b0f3c221a2 8a07

#### 3. Cranking up climate change

Yep, plastic is behind climate change, too. Plastic is made from petroleum and making plastic products accounts for around 8 percent of the world's oil production. That figure is projected to rise to 20 percent by 2050. Drilling for oil and processing it into plastic releases greenhouse gases into the environment, which causes global warming and hence contribute to climate change. And wait, there's more. Even when it's just sitting around in seawater and sunlight, plastic releases green house gases.

#### No, you're not hallucinating...

The plastic waste items that can be used for road construction are various items like plastic carrybags, plastic cups, plastic packaging for potato chips, biscuits, chocolates, etc. Source: https://www.thebetterindia.com/43685/ plastic-waste-in-road-construction-plastic-manindia-prof-vasudevan/

#### 4. Blocked drain, major pain

We're still going. Did you know that plastic waste can cause flooding in cities? The thing is, plastic bags clogs drains and waterways, which is a key cause of urban flooding in many countries such as India and Bangladesh.

#### 5. Sick of plastic!

When plastic bags block sewage systems, this results in stagnant water that provides a breeding ground for mosquitoes and other pests. This situation can lead to the spread of malaria and other vector-borne diseases. Source: Single-Use Plastics—A Roadmap for Sustainability

#### 6. Costing us big bucks

Cleaning up the plastic mess is expensive. In fact, we spend billions each year dealing with waste.

Single-use Plastic affects our economies in other ways, too, for example by discouraging tourism. Who wants to go visit places covered in plastic waste?



According to the State of Plastics report, "Studies

suggest that the total economic damage to the world's marine ecosystem caused by plastic amounts to more than \$8 billion every year."

**Source:** http://worldenvironmentday.global/en/ news/infographic-if-you-can%E2%80%99t-reuse-itrefuse-it



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### **LEVEL 2: Leader level**

#### **GROUP ACTIVITIES**

Observe a **Single-use Plastic Awareness Week** at your school/ institution/ office/ village neighbourhood.

Don't forget to invite and send press releases of your awareness activities to local print and A/V media. Use social media as well for sharing your work on combating plastic pollution – tag us in your posts.

## Ideas for Awareness Week activities ((conducting any TWO activities is mandatery)):

- Hold an exhibition and invite parents/friends/ colleagues/community.
- Conduct competitions such as debate, quiz, songs, poetry, poster, rangoli etc.
- Organize an awareness rally/nukkad natak/skit in your institution/neighbourhood/locality.
- Create a Tide Turners Plastic Challenge Display Board in your campus/premises. Display information about plastic pollution, single use plastic ban and alternatives.
- Invite an expert such as municipal official/local NGO/ innovators for an interactive session on SUPs
- Any other activity for awareness generation

For rural youth, a public place can be chosen to conduct the awareness mela. Wall painting with messages can also be used for awareness creation.z

## Now, report level 2 activities on your dashboard and tell us about the:

- dates of awareness week
- types of activities conducted during the week
- total numbers of activities conducted
- total number of people reached out during the awareness week

Upload up to 5 photographs and press clippings of the awareness activities.

Hurray! Now your group is ready to move to the champion level of the challenge!

#### **NCC Group**

Nodal Officer or Coordinator may organize a single-use plastic awareness campaign in coastal and other ecologically fragile areas. You can also connect to the **Puneet Sagar Abhiyaan.** Here are ideas for the awareness campaign. (It is mandatory to conduct one activity to move to the next level.)

- Cadets can organize an awareness rally, nukkad-natak, or street play at their institution or in their neighbourhoods to raise awareness of SUPPs and the impacts of plastic pollution.
- Cadets can conduct one-on-one discussions with community groups such as fishers (in coastal states), shopkeepers in markets, and the general public.

#### **Corporates and Offices**

Organize an awareness drive on single-use plastics in your community. Here are ideas for awareness activities. (It is mandatory to conduct any two activities)

- Hold an exhibition on plastics and SUPs & invite parents/friends/community
- Organize an awareness rally/nukkadnatak/street play
- Organise a Marathon in your institution/ neighbourhood/locality to mark awareness of SUPs
- Movie Screening on plastic pollution
- Any other activity that helps raise awareness

## LDID YOU KNOW ?

Cigarette filters contain tiny plastic fibres? In fact in a recent Global survey, cigarettes were the most common type of plastic waste found in the environment. Other sneak plastic can be found in chewing gum, clothing, glitter and tea bags.

### **INDIVIDUAL ACTIVITIES**

Identify a problem related to plastics in your chosen sector. Select a location that faces a problem with plastics:

- Hotels / Restaurants / Food stalls / Hospitality
- Households / Residential area
- Vegetable or fruit Markets or any other market complexes

Conduct a survey to record the status of SUP ban awareness and implementation in your area. You may use the survey form available on the website in library to conduct this activity. For conducting the survey, take a sample size of at least 10 stakeholders. Analyze your results and identify possible solutions

## Now, report level 2 activities on your dashboard and tell us about the:

- Location selected for awareness and survey
- Number of stakeholders surveyed
- Number of people observing SUP ban found during the survey
- Number of people not observing SUP ban found during the survey

Upload up to 5 action photographs with the stakeholders. A short report of the survey results about SUP ban awareness and implementation in the selected location (pdf/word/jpg/png).

Hurray! Now you are ready to move to the champion level of the challenge!

The Ministry of Environment, Forest and Climate Change, Government of India, notified the Plastic Waste Management Amendment Rules, 2021, which prohibit identified single use plastic items which have low utility and high littering potential by 2022. India is committed to take action for mitigation of pollution caused by littered Single Use Plastics. In the 4th United Nations Environment Assembly held in 2019, India had piloted a resolution on addressing single use plastic products pollution, recognizing the urgent need for the global community to focus on this very important issue. The adoption of this resolution at UNEA 4 was a significant step.

The manufacture, import, stocking, distribution, sale and use of following single-use plastic, including polystyrene and expanded polystyrene, commodities shall be prohibited with effect from the 1st July, 2022:

a. earbuds with plastic sticks, plastic sticks for balloons, plastic flags, candy sticks, icecream sticks, polystyrene [Thermocol] for decoration;

b. plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays, wrapping or packaging films around sweet boxes, invitation cards, cigarette packets, plastic or PVC banners less than 100 micron, stirrers.

Source: https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1745433



## **Background Information**

#### How can the world solve plastic pollution?

Governments need to create strong policies that encourage a more circular way to design, produce and consume plastics. They also need to make sure all plastic products are properly labelled so everyone knows what can be recycled and how. Segregation at source is Integral to a good waste management system. It improves collection and processing efficiency.

So far, more than 60 countries have introduced national laws on plastic bags and Styrofoam products.

pesign/manufacture

circular

economy

One of the most important aspects of sustainability is achieving a circular economy. A circular economy is an alternative to the traditional linear way that economies work, in which we make stuff, use it, and dispose of it. In a circular economy, we hang on to and use resources for as long as possible, get the most value out of them, and then find ways to recover and regenerate products and materials.

They need to encourage and invest in research and innovation for new solutions, and to raise awareness amongst everyone about reducing or cutting out single-use plastics. The businesses, corporates, RWAs and institutions need to enforce these policies at the local level and make sure that plastic is consumed and disposed off responsibly. Tie up with local recyclers, mandating waste segregation and periodic collection of waste by recyclers.

#### Share! Show off! You're a tide turner!

Completed any of the challenges yet? Make sure you shout about it and let the world know! What was fun about the challenge? What was not so great? Did you learn something that surprised you? Did you inspire anyone else? We want your photos, videos and stories!

 Tag us at @WWFINDIA | @CEE

 Email : tideturner@ceeindia.org | tideturner@wwfindia.net

 Instagram: @cee\_india @plastictidetuners\_india

 Facebook: @Centre for Environment Education

 Twitter: @CEEAhmedabad

When you count regulations at local levels as well, there are more than **140 laws around the** world aimed at banning and discouraging the use of plastic bags and Styrofoam.

epairfrecycling

Mostly, it's too soon to say if the laws are actually working. But in **30 percent** of cases, dramatic drops in plastic pollution and plastic bags usage have already been reported.

As India progresses towards a circular economy, there is need to transition towards improved waste management systems with increased emphasis on

information, education, and communication (IEC) amongst its citizens on the issues relating to plastic waste management.

Source: https://www.teriin.org/sites/default/ files/2018-06/plastic-waste-management\_0.pdf

## **LEVEL 3: Champion Level**

### **GROUP ACTIVITIES**

Now you are ready to take action to beat plastic pollution. Conducting any ONE activity is mandatory for completion of a challenge.

Organize **clean up drive** at any of these locations which needs a clean-up:

- Waterbody riverbank/lakeside/pond/beach
- Land-streets/campus/mountain areas or any other common place of public interest.

Remember to follow covid appropriate behaviour and wear safety gears such as gloves and masks while doing the clean-up activity. Measure the quantity of plastic waste collected (in kg) and give it to the local waste collector to support her livelihood and make the environment happy at the same time!

Set up a **system for plastic waste management** focusing on segregate – collect – recycle in your campus/institution/community.

Start the plastic waste segregation system. Conduct plastic collection drives for a week. Measure the quantity of plastic waste collected (in kg). Invite local recyclers to take the collected plastic waste.

Get all involved in the activity to take a pledge for not using SUPs.

## Now, report level 3 activities on your dashboard and tell us about the:

- Site selected
- Activity selected
- Date/s of the activity (clean-up/setting up systems)
- Total quantity of plastic collected and sent for recycling in Kgs
- Total number of people reached out

Upload up to 5 photographs of the activities.

Note: Make sure to take prior permissions and give proper sanitation and health measures before conducting the clean-up.

#### I Pledge to

- Refuse the use of single use plastic products.
- Stop using single use plastics in events and celebrations organized at my home and school.
- Adopt sustainable alternatives to single use plastics in my daily life.
- Promote awareness among students and all my colleagues about harmful effects of single use plastics and encourage them to adopt alternatives.

#### **NCC Group**

Conduct a plastic clean-up connected to the **Puneet Sagar Abhiyaan**.

Identify an ecologically fragile hotspot such as a coastal area, banks of a river, lake, or pond, or hilly area where plastic is littered or dumped. The NCC Leader may engage the cadets and run a plastic clean-up drive in the chosen area.

Note: Don't forget to take before and after photos of the clean-up site.

Collect and segregate the plastic waste. Connect with a ragpicker to enhance the power of the informal sector and with a recycler to send the SUPPs for recycling.

Take the TTPC Pledge with your cadets or group members.

### **Corporates and Offices**

You can select any one activity to complete this level of the challenge.

Conduct a **Plastic Clean Up.** Identify an ecologically/culturally significant area near your institution premises or any ecologically fragile area (coastal areas, river banks, lake or pond sides, forest etc) where there is littering or dumping of plastic waste. Organize a clean-up drive engaging all members. Segregate/ Accumulate the waste collected and connect with a ragpicker to enhance the power of the informal sector and with a Recycler to advance the SUPs for recycling.

Plant a plastic waste segregation/collection bank in your workspace. Collect the generated plastic waste for a week. Connect with the recycler to advance the collected plastics for recycling.

Institute a policy change on SUP use in your institution. Conduct an audit of SUP use in the premises. Identify actions you would like to implement as policy. Have meetings with the management teams in your institution to suggest policy change.

Any other action towards a long-term solution for SUP use in your premises or at the community level.

Note: Make sure to take prior permissions and give proper sanitation and health measures before conducting the clean-up.

#### **INDIVIDUAL ACTIVITIES**

You are very close to becoming a Tide Turners Plastic Champion. Now it is time for ground level ACTION.

Conducting any ONE activity is mandatory for completion of a challenge.

Pick up your observation lens and identify an ecologically fragile hotspot to conduct a plastic **clean up drive.** Such as river bank/wetland/beach/ mountain area etc. Geo-tag the clean-up site.

You can invite more people to join the clean up such as visitors, local community members, fishers, waste collectors, recyclers etc. to join you for the activity.

Measure the quantity of plastic waste collected (in kg). Invite local recyclers to take the collected plastic waste.

#### Encourage implementation of SUP Ban

Sensitize and influence the target group reached out to during leader level to implement plastic ban in their establishments. You can use the resources from the library section (tide-turners.org) to generate awareness.

Encourage stakeholders to adopt process and colour bin systems as per waste management rules at the premises. After a week, evaluate how your intervention has affected the practices and behaviour in the target group. Make the establishment owner sign a pledge to implement SUP ban.

Note: Remember to take photos of your interactions with stakeholders and changes in the SUP use practices.

#### **CLEAN UP Drive**

- Type of clean up site selected
- Type of stakeholders engaged
- Total quantity of plastic collected in Kgs
- Total number of people engaged in clean up drive
- Who were you able to engage through this activity?

#### **SUP Ban implementation**

- Type of stakeholders engaged
- No. of people/establishments that have already implemented SUP Ban
- No. of establishments that have begun or are willing to begin implementing a SUP ban as a result of your intervention.
- Type of SUPs that have been discontinued by the establishment
- What is the alternative introduced to replace the plastics by the establishment?
- Upload the signed pledge from establishment or a photograph of the stakeholders with the pledge.

Upload up to 5 photographs of the activities (before and after) and upload an report on the solutions executed.

Congratulations for completing the Challenge! Take a quick survey and share your reflections.



## Appendices

## Appendix 1

#### **COVID-19 and plastics**

A major period of the year 2020 and 2021 has been spent battling the pandemic, caused by Covid-19, a zoonotic disease. Let's learn how the pandemic affects plastic pollution.

#### What is COVID-19?

"COVID-19 is the infectious disease caused by the most recently discovered coronavirus. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019. COVID-19 is now a pandemic affecting many countries globally.

The COVID-19 virus (also called SARS-CoV-2) is a new virus in humans. The possible animal source of COVID-19 has not yet been confirmed but research is ongoing." -WHO

Face masks typically contain polypropylene (PP), which, due to the microfibers' hydrophobic composition, acts as a protective layer against bodily fluid droplets. Other more intricate and expensive face masks include polyurethane (PUR) and/or polyacrylonitrile (PAN).

#### Myths around plzastic usage during COVID -19

Myths around plastic usage during COVID -19	Single-use plastics have low risk contamination	Virus stays on plastic surfaces for shorter duration
There is no evidence yet, to prove that	Single-use products are extending and amplifying the risk of COVID*	Virus stays on plastics for more than 72 hours (more than other surfaces), which makes single-use gloves and masks more prone to spreading the disease

### COVID-19 litter issues

- Our streets, beaches and ocean have been hit by a tidal wave of COVID-19 waste including plastic face masks, gloves, hand sanitizer bottles and food packaging (UNCTAD).
- Physical distancing has also led to a flood of products delivered daily to homes wrapped in a plethora of packaging as people turn to online shopping and takeout services. (UNCTAD).
- Plastic sacks of medical waste piling up outside hospitals, and used personal protective equipment are found floating in coastal waters and washing up on the world's beaches. (World Economic Forum).
- Many waste-management services have not been operating in full capacity, owing to physical distancing norms and thus leading to slower disposal of plastic waste. (World Economic Forum)



#### **Plastic Production during the COVID-19**

- Production of disposable masks and global sales has seen a drastic increase from around \$800 million in 2019 to \$166 billion this year (UNCTAD).
- Every month the world needs 89 million plastic medical masks, 76 million plastic examinatio n masks and 1.6 million plastic protective goggles (WHO).

#### Single-use Plastic Turns Hero in Corona Battle!

Plastics have become indispensable during the pandemic. Face masks, gloves, Personal Protective Equipment (PPE), hand sanitizers, include plastic in their production or packaging, or both. Single-use plastic is now the safest protective material used by frontline workers in the health care sector, relief missions, stores and online delivery services.

As COVID-19 has spread to the developing world, with limited access to medical support, increased numbers of cases will have to self-medicate at home. This has increased the use of protective material in households too.

#### Increased use by the public

The use of face masks, gloves, hand sanitizers and the increased dependence on foods and other products procured online, have also stepped up the generation of single-use plastic greatly.

## Are we Heading Towards a Tsunami of Plastic Pollutants?

- COVID 19 can also spread, if the waste from infected patient is not managed properly.
- It is a fact that plastics waste constitutes a significant portion of the total municipal solid waste (MSW) generated in India.
- Plastics are non-biodegradable and remain on

earth for thousands of years.

 Incorrect disposal and waste management have led to plastic products such as gloves, masks and hand sanitizer bottles being found in the natural environments.

Improper management of household medical waste will further spread the COVID-19 virus and put others, including waste workers at risk.

#### What is a zoonotic disease? 🍅 🧿

- A zoonosis is any disease or infection that is naturally transmissible from vertebrate animals to humans.
- There are over 200 known types of zoonoses.
- Ebola, avian influenza (or bird flu), H1N1 flu virus (or swine flu), Middle East respiratory syndrome (MERS), Rift Valley fever, sudden acute respiratory syndrome (SARS), West Nile virus, the Zika virus and now the novel corona virus or COVID 19 are some examples of zoonotic diseases.
- Zoonotic pathogens may be bacterial, viral or parasitic, or may involve unconventional agents and can spread to humans through direct contact or through food, water or the environment.
- Some zoonoses, such as rabies, are 100% preventable through vaccination and other methods.

To know more: https://www.youtube.com/ watch?v=2rr7u04m5Nc&feature=youtu.be

#### What Can You Do to Help?

- Make yourself aware and spread awareness. It is a priority!
- Practice and encourage the use of face masks, in combination with frequent hand washing with soap and water or an alcohol-based rub, that is packaged sustainably.
- Create awareness in your neighbourhood about correct disposal of used masks, gloves and other bio-medical waste in designated containers to be provided by the society. These, if discarded indiscriminately by the public, pose health hazards.
- Emphasize the importance of practicing safe measures like social or physical distancing, as well as avoiding touching the eyes, mouth, or nose.
- Educate your peers and community on the need to segregate waste, especially medical waste at home. It is
  instrumental in containing the spread of Covid-19, as well as limiting the amount of recyclable plastic waste
  from ending in landfills and oceans.
- Conduct awareness campaigns and give practical guidance based on WHO guidelines and those being brought out by the government from time to time.

Devise innovative ways to engage the community in actively containing the spread of COVID-19, as also reducing the generation of plastic waste.

To access more know-how on safe disposal of household medical waste, refer to:

https://wedocs.unep.org/bitstream/handle/20.500.11822/32775/FS7.pdf?sequence=1&isAllowed=y COVID 19 Waste Management FACTSHEET https://wedocs.unep.org/bitstream/handle/20.500.11822/32282/ COVIDWM.pdf?sequence=1&isAllowed=y



## Appendix 2

#### What are world leaders doing about plastics?

Smile, y'all. We promised you good news and here it is. All over the world, people are joining forces to reduce plastic waste. Let's check out some of what's been happening.

## The Food and Agriculture Organization is working on better food packaging

A big share of plastic packaging comes from food in developing countries. The Food and Agriculture Organization of the UN (FAO) is working on ways to replace plastic packaging with packaging made out of biomass. This could include packaging made from tree fibers, corn starch, potatoes and food waste. Making the switch will help us move away from polluting plastics. It will also provide a nice circular solution, because when bio-based packaging reaches its end-of-life stage it can be used for composting.

Adapted from the FAO report Bio-based food packaging in Sustainable Development: www.bit. ly/2t8m9RB

Learn more about FAO's work on creating a bio-based, reuse economy: www.bit. Iy/2ROcxFS



Food and Agriculture Organization of the United Nations

#### UN Environment Clean Seas campaigns



#### #CleanSeas

In February 2017, UN Environment launched the Clean Seas campaign to bring together governments, the general public and the private sector to fight marine plastic pollution. So far, more than 57 countries have joined the movement, and companies are entering the fray, too. In fact, Volvo Cars has announced that, starting in 2025, at least 25 per cent of the plastics used in new Volvo car models will come from recycled materials. Regular people can join, too! Find inspiration in the story of one young man who launched the world's largest beach clean-up. Then take the pledge and join the movement.





## What do you do when someone tags you in a photo that's not your best?

- Unfriend. That's also what many governments are deciding to do with single-use plastics.
- In Africa, 25 countries have introduced bans on plastic bags and more than half of them kicked off the ban between 2014 and 2017.
- The European Union parliament has voted to ban single-use plastics, and if all goes according to plan, it will take effect by 2021.
- Costa Rica is on a mission to be the first country in the world to eliminate single-use plastics by 2021.
- New York City, USA, banned all Styrofoam products in 2017.
- India has vowed to eliminate all single-use plastics by 2022. In addition, several states and cities in the country have introduced bans on plastic carry bags and other plastic materials.
- Japan is an interesting example, where, with no bans on single-use plastic, they still manage relatively little plastic pollution. How're they pulling it off? Thanks to a very effective waste management system and a population that largely cares about the planet.



Learn more about what governments around the world are doing about plastic in Chapters 3 and 4 of Single-Use Plastics— A Roadmap for Sustainability.

## Appendix 3

#### **Plastics and the SDGs**

#### How are they connected?

The Sustainable Development Goals (SDGs) are a set of 17 goals that the international community identified as our world's most pressing needs, which we need to achieve by 2030 to nail a more sustainable future for everyone.



It's not a stretch to say we can't achieve the SDGs unless we get a handle on our plastics problem.

As you know by now, plastics endanger wildlife, threaten human health, worsen problems like climate change, flooding, and disease, and cost our global economy billions each year. Good thing, then, that the people who designed the SDGs included a whole bunch of goals that are directly linked to plastics.

With everyone buckling up and getting to work on the SDGs, there's a lot of hope on the horizon that we'll all do something about plastic pollution and other global problems together.

The above SDGs are the ones most closely linked to plastic pollution. Learn more about specific targets within the SDGs that are relevant to plastic pollution on **page 21** of the publication:

Towards Responsible Use of Plastics—Reduce, Reuse, Recycle : https://bit.ly/2WCuTgx







Government of India nistry of Environment, Forest & Climate Change Department for Environment Food & Rural Affairs





