

Let's make the water
CHAKACHAK



The background of the page features a stylized illustration of four hands in shades of teal and blue, cupping a central globe. The hands are rendered in a simple, graphic style with thick outlines. The globe is a light blue color, and the overall composition is centered and symmetrical.

About the Programme

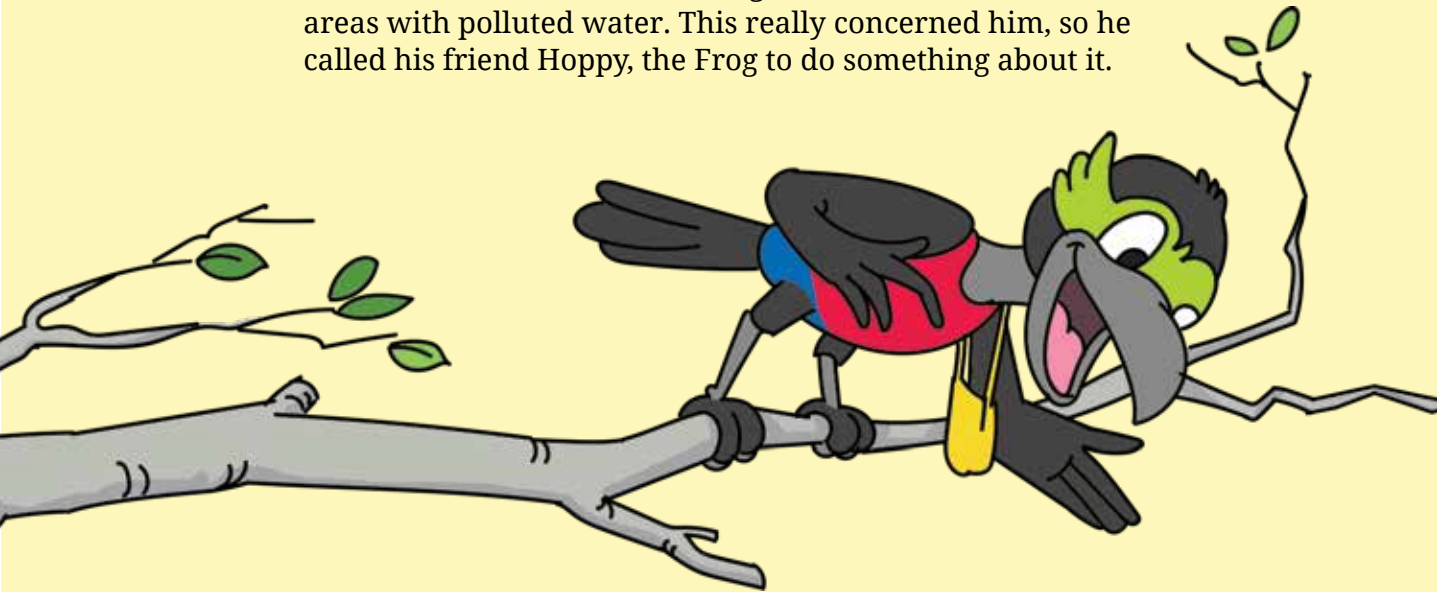
HCL Foundation, the corporate social responsibility arm of the multinational company HCL, was established in 2011. HCL Foundation aims to bring about a lasting impact in the lives of people through long-term sustainable programmes in WASH, education, health, livelihoods and environment.

With its corporate headquarters in NOIDA, UP and realising that there is a need for a long-term vision to manage solid, liquid waste, HCL Foundation has partnered with NOIDA administration to strengthen the city's waste management system and contribute in making it one of the cleanest cities in the country. For this, HCL Foundation has launched an initiative called Clean NOIDA and intends to carry out works and services to implement effective waste management in NOIDA city. This initiative aims to transform the city into a litter and waste free region, covering all the Residents Welfare Associations (RWAs), markets and urban villages.

The major focus areas of the project are capacity building of relevant stakeholders, intensive behaviour change campaigns, awareness drives and technological solutions.

Introduction

Hi kids! Remember 3R? He was flying over Saaf Nagar when he saw a lot of water being wasted and also saw areas with polluted water. This really concerned him, so he called his friend Hoppy, the Frog to do something about it.



3R: Hoppy, there are so many areas in Saaf Nagar where water bodies are getting contaminated. This will lead to water shortage, water-borne diseases, and harm the environment. I need your help!

Hoppy: Yes 3R. I too have seen many areas where water is polluted. I will go around Saaf Nagar and spread awareness on how to conserve water and prevent water pollution.

3R: Good! You know, the United Nations recognises the importance of addressing the global water crisis each year on 22 March on the occasion of World Water Day. We should also be responsible and help raise awareness about access to safe water. This year's theme of World Water Day is Groundwater under which exploring, protecting and sustainably using groundwater will be central to surviving and adapting to climate change.

Hoppy: Ok 3R, I will get going now to do my bit to address the problems related to water and find solutions. See you in Saaf Nagar!



Be Water Wise

Hoppy and 3R are now in Saaf Nagar to spread awareness on water pollution.

Hi kids! You all know that water is an important source of life. Have you ever wondered where does it come from?

From the ground and from the clouds!

The main sources of water are rainwater, groundwater and surface water. Only about 3% of the Earth's water is freshwater. Of that, only about 1.2% can be used as drinking water; the rest is frozen in glaciers or buried deep in the ground. Most of our drinking water comes from rivers and streams.



This is why we all need to make efforts to stop wasting this precious resource and conserve it instead.

How can we conserve water?

We can do so by adopting methods like rainwater harvesting, water recycling, and making soak pits about which you will learn in the next story.

Okay, I was wondering if water pollution also affects the availability of water. Is that so Hoppy?

That is a wonderful question. First let me explain what water pollution is. Water pollution is the contamination of water bodies by substances that make the water unsuitable for drinking, cooking, cleaning and other activities.

Ohh! So what contaminates the water?

The following result in water contamination:

Disposal of garbage into water

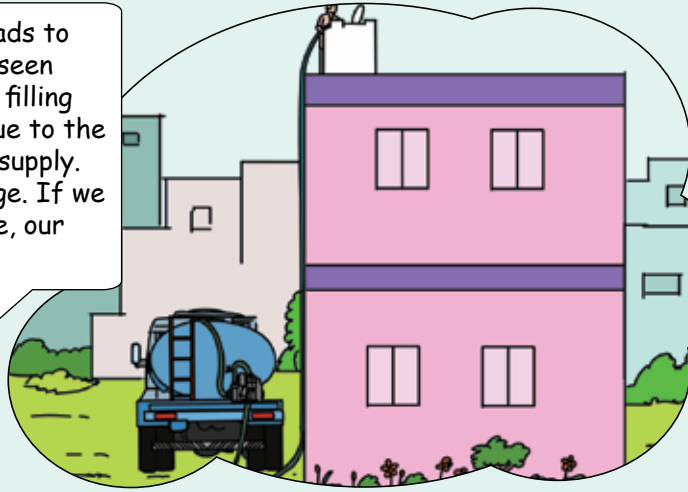
Dumping of untreated sewage

Fertilisers and pesticides used in farming get washed away into water bodies

Dumping of industrial chemicals and toxic effluents into rivers and streams

Oil spills

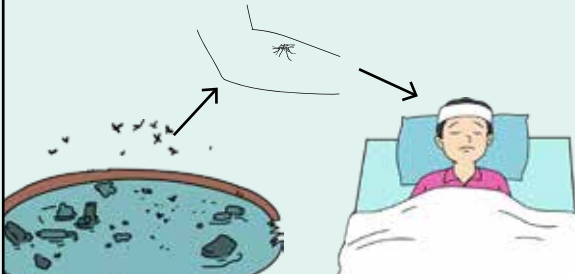
You know, water pollution leads to water crisis. You must have seen water tankers coming in and filling the water tanks in houses due to the absence of/affected water supply. This indicates water shortage. If we do not address this shortage, our future will be in danger.



Does dirty water cause health problems?



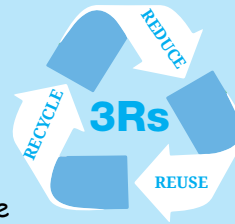
Yes, contaminated water is the main cause of water-borne diseases, such as cholera, dysentery, typhoid, diarrhoea, etc. Plus, when there is stagnant water, it leads to mosquito breeding that results in diseases like malaria and dengue.



Be Water Wise!

Remember the 3Rs of waste management? We can use the 3Rs even for water conservation.

Recycle
By using methods like rainwater harvesting, we actually recycle the water that helps revitalise the groundwater level.



Reduce
Reduce the overall usage of water, thereby reducing water wastage.

Reuse
Reusing waste water will help decrease the pressure on usage of fresh water.

I hope I have been able to convey how important it is for us to prevent water contamination or water pollution. Will you too do your bit to save this precious resource?



Did You Know?

① Four billion people — almost **two-thirds** of the world's population — experience severe water scarcity for at least one month each year.



② Around **80%** of India's water is severely polluted because people dump raw sewage, silt and garbage into the rivers and lakes.

③ More than **6 billion pounds** of garbage, mainly plastic, end up in the oceans every year.



④ **3.2 million** children under the age of five in developing nations die each year as a result of drinking unsafe water and poor sanitation.

⑤ Asia has the **maximum number** of polluted rivers than anywhere else in the world.



Possible Solutions

Water crisis is the lack of fresh water resources to meet the standard water demand. When water is scarce, access to safe drinking water becomes difficult. This affects our day-to-day activities like practising basic hygiene at home, schools and in workplaces. A water crisis is inevitable if we do not do our bit to conserve water.

Shyam ji: Is there a way out?

Hoppy: Yes, there is! Water recycling is one way. Water recycling is the process of collecting, treating and using wastewater, particularly from municipalities, industries and agriculture. The recycled water can be used for irrigation or industrial purposes.

Komal Kaaki: I saw a pit in my neighbour's house; she said it was for water management. Is that also a form of water recycling?

Hoppy: Yes, I think you are talking about the soak pit which filters grey water (domestic wastewater) and helps prevent the clogging of water bodies. **Hoppy:** Yes, there is!

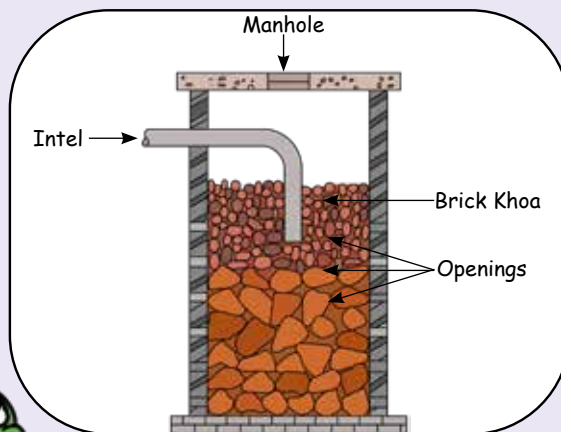
Komal Kaaki: Is it like a compost pit that 3R taught us about?

Hoppy: The soak pit partially filters the waste water that is generated from domestic use. It is built underground and is closed, rectangular or circular in shape, kind of covered-up construction within walls, built with porous materials like soil, silt, clay, etc.

Komal Kaaki: Where can we build it?

Hoppy: The soak pit can be connected to the primary treatment unit or directly connected to the washroom. It allows the surface water to slowly penetrate into the ground, percolating through the porous materials, thereby recharging the groundwater.

Shyam ji and Komal Kaaki: Thank you Hoppy. We will also consider making a soak pit in our house.



Baarish ki har boond, hai zaruri

(Darshan sir discussing about rainwater harvesting with Komal Kaaki)

Komal Kaaki: Darshan sir, all this water wastage is bothering me.

Darshan sir: Rainwater harvesting is a simple process used to conserve rainwater by collecting, storing and purifying the water that flows from rooftops, parks, roads, open grounds, etc. for later use.



Komal Kaaki: How does this process help in water conservation?

Darshan sir: Rainwater harvesting is a very effective method of conserving natural water and replenishing the groundwater level. In this method, the rainwater is collected and allowed to percolate into a deep pit or

Komal Kaaki: How do we collect the flowing rainwater?

Darshan sir: The process of rainwater harvesting involves the collection and storage of rainwater with the help of artificially designed systems that run off naturally or man-made catchment areas like the rooftop, compounds, rock surfaces, hill slopes, artificially repaired impervious or semi-impervious land surface. Most buildings that utilise rainwater harvesting systems have a built-in catchment area on the rooftop.

a reservoir, so that it seeps down and improves the groundwater table.

It reduces soil erosion and flood hazards by collecting rainwater, and reducing the flow of stormwater to prevent urban flooding.

Komal Kaaki: For what purpose can we use this purified water?

Darshan sir: This harvested rainwater can be used for irrigation, washing, cleaning, bathing and also for other livestock requirements.



What can I do to help conserve water?

- 
1. Close taps properly - saves up to 900 litres a month
 2. Turn the tap off when washing hands, face, brushing teeth - saves up to 20 litres a month
 3. Use a cup of water when brushing teeth
 4. Fix leaking toilets - saves up to 22,000 litres a month
 5. Do not rinse or wash dishes under the running tap
 6. Reuse RO and AC water
 7. While waiting for hot water to come in the tap, do not waste the flowing water. Instead, fill it in a mug or bucket for later use
 8. Collect rainwater for use in the garden and to wash vehicles
 9. Use a broom instead of a pipe while cleaning outside the house
 10. When washing clothes with hands, use the soap water (grey water) to flush the toilet instead of throwing it away

ACTIVITY 1 Poem on Water Conservation or Water Pollution



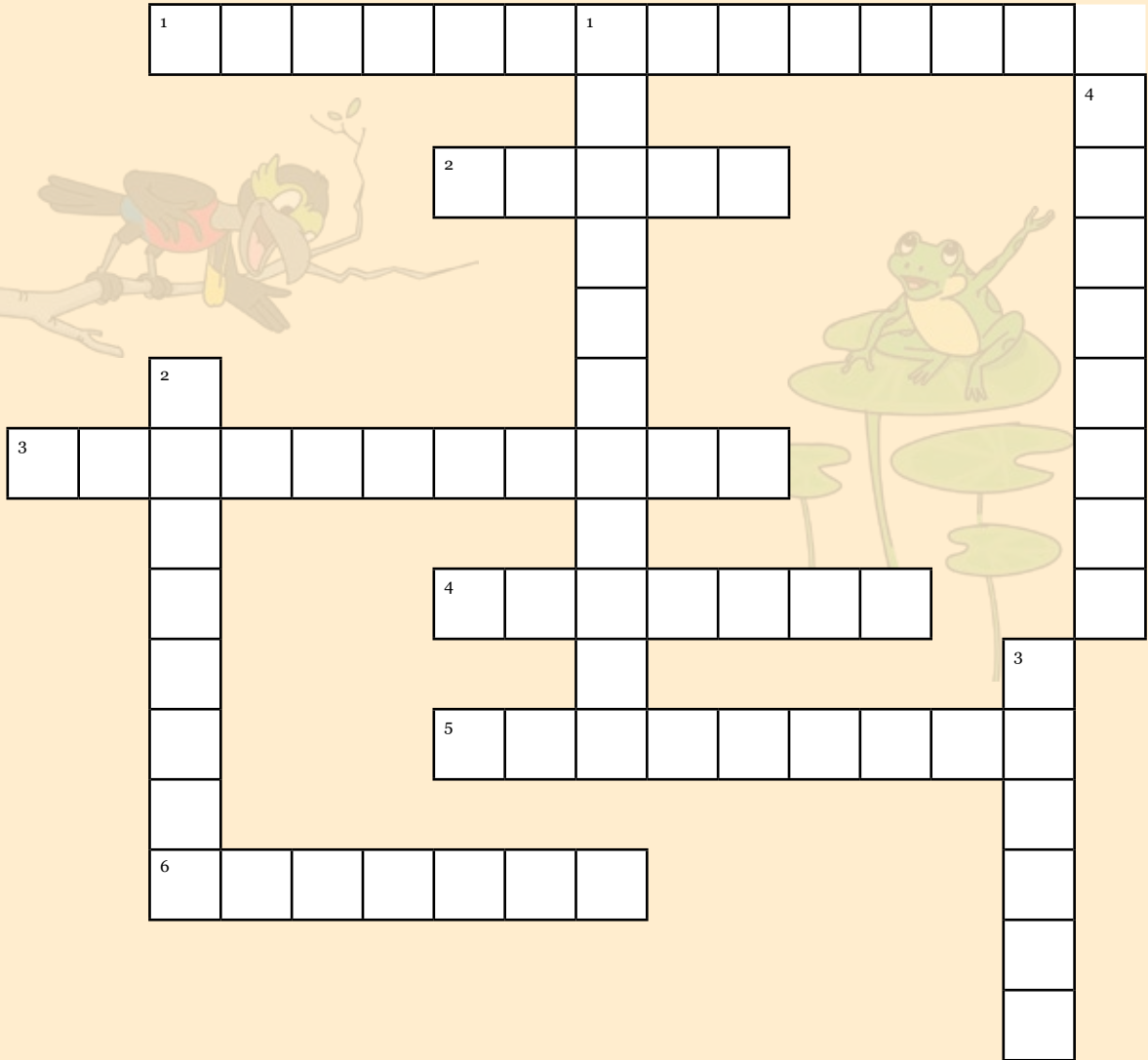
Hi Kids! Tell us what you think about Water Conservation or Water Pollution by writing a poem in Hindi or English. The poem should not exceed 400 words.

This activity is for kids only. Take a photo of the poem that you have written and send it to 9667743455 with your name, address and contact details. The best poem will win exciting prizes.



ACTIVITY 2

Fill in the crossword puzzle using the clues below:



Clues

Across

1. Water pollution is the contamination of water bodies.
2. Each year, World Water Day is celebrated on 22 March.
3. One of the main sources of water is groundwater.
4. Contaminated water causes diseases like Cholera.
5. Rainwater harvesting is an effective way of conserving natural water.
6. Factories dispose chemicals into rivers and streams leading to water contamination.

Down

1. Recycled water can be used for irrigation.
2. The soak pit allows the surface water to slowly penetrate into the ground.
3. Water pollution leads to water crisis.
4. Stagnant water leads to mosquito breeding which results in diseases.



This activity is for kids only. Take a photo of the solved puzzle and send it to 9667743455 with your name, address and contact details. Entries with correct answers will win exciting prizes.

ACTIVITY 3

Find all the 12 hidden words related to water crisis and conservation of water.



This activity is for kids only. Take a photo of the solved puzzle and send it to 9667743455 with your name, address and contact details. Entries with correct answers will win exciting prizes.

X	C	O	N	T	A	M	I	N	A	T	I	O	N
W	G	C	O	N	S	E	R	V	A	T	I	O	N
O	S	A	A	F	N	A	G	A	R	L	F	T	D
R	P	X	G	L	O	H	R	V	N	X	U	I	F
L	U	P	R	N	Z	E	E	Y	D	I	L	A	R
D	N	O	O	R	E	C	Y	C	L	I	N	G	E
W	C	L	U	A	K	K	W	R	E	U	S	E	S
A	L	L	N	Y	Z	V	A	F	S	C	L	R	H
T	O	U	D	W	R	Q	T	N	G	J	S	N	W
E	G	T	W	E	O	U	E	Z	S	R	H	K	A
R	G	I	A	I	X	G	R	O	U	B	I	R	T
D	I	O	T	A	Q	W	W	A	S	T	A	G	E
A	N	N	E	D	D	Q	B	H	Z	U	K	L	R
Y	G	R	R	W	A	V	Q	M	F	K	T	R	T



ACTIVITY 4

Dear kids, use your knowledge and ideas to make a Poster on Water Conservation.



This activity is for kids only. Please take a photo of the poster and send it to 9667743455 with your name, address and contact details. The best poster entry will win exciting prizes.



LET'S LEARN

Make a water filter to see how dirty water comes out clean through the process of filtration.

What you will need:

1. Plastic bottle – cleaned and dried
2. Knife
3. Dirty water – make your own with water and mud
4. Cup
5. Spoon
6. Filter materials – small stones and cotton balls
7. Old sock, napkin or paper towel

Directions

1. Cut the plastic bottle into half (take the help of an adult, if required).
2. Take out the cap and flip the bottle's top half over and put it in the bottom half so the top looks like a funnel.
3. Place the sock or napkin at the bottom of your filter.
4. Add stones, cotton balls in layers. You can make as many layers as you like.
5. Stir your dirty water and pour a cup of dirty water into the filter.
6. Observe how long the water takes to go through the filter.
7. Once all the water has trickled down into the bottle, take out the filter materials, one at a time. You will see what each layer looks like when you take it out of the water.

The longer it takes for water to move through a filter, the cleaner it gets. **Your filtered water is not clean enough to drink**, but now you know how the process of filtering works!





List of 100 winners

from previous edition *Let's make the city CHAKACHAK*

Shalini Rai	Laxman	Aruhi Gupta	Kajal
Pritha Chauhan	Vaibhav Tiwari	Simran	Kohinoor
Jagdishwari	Dev Mandal	Puspa Kumari	Aman Yadav
Swati Dixit	Urvashi	Anmol Singh	Aadesh
Amrit Rajput	Devansh Agrawal	Ritik Aggarwal	Krishna
Rishit Kanodia	Hemant	Aditya Kumar	Harsh Pandit
Rohit	Abhishek	Sonu Kumar	Divyanshi
Kasif Khan	Vipullaxmi Kapoor	Shivam	Aarna Gupta
Radhika Chauhan	Vaishnavi Sharma	Rishabh Kumar	Ojas Maheswari
Kumkum Chaudhary	Saloni Prasad	Khushboo	Saksham Tiwari
Deepanshu Saini	Maira Shadab	Ankush Kumar	Ritish Kumar
Aarav Sinha	Sakshi	Khushbhoo	Apoorv Mauyra
Naina	Ashish	Prince Kataria	Antriksh Pandey
Annu	Samridhi Maru	Sakshi	Sona
Janvi	Twinkle	Tushar Chauhan	Samriddhi Jain
Chhavi	Farin Khan	Ayush	Priya
Arshita Sengar	Samridhi Garg	Yug Sharma	Saksham Maurya
Hitesh Mehra	Dinesh Chauhan	Ravi Kumar	Disha Jain
Krishna	Tayaba Parveen	Divyaansh Dave	Shivani Yadav
Vanshika Tiwari	Ranvee Jain	Anshul Tripathi	Darsh Agarwal
Geetanjali	Ayushi Priya	Lavish	Avni Khatri
Kunal	Krishna	Vihaan Rawat	Soni Yadav
Khushi Chauhan	Aarav	Akshat Pandey	Nikita Soni
Teestha Singh	Payal Tanwar	Ravi	Preesha Jain
Sadhana	Anjali Kumari	Atharv Mehrotra	Tanmay Kedawat

The last date for submission of entries is 31 July 2022.