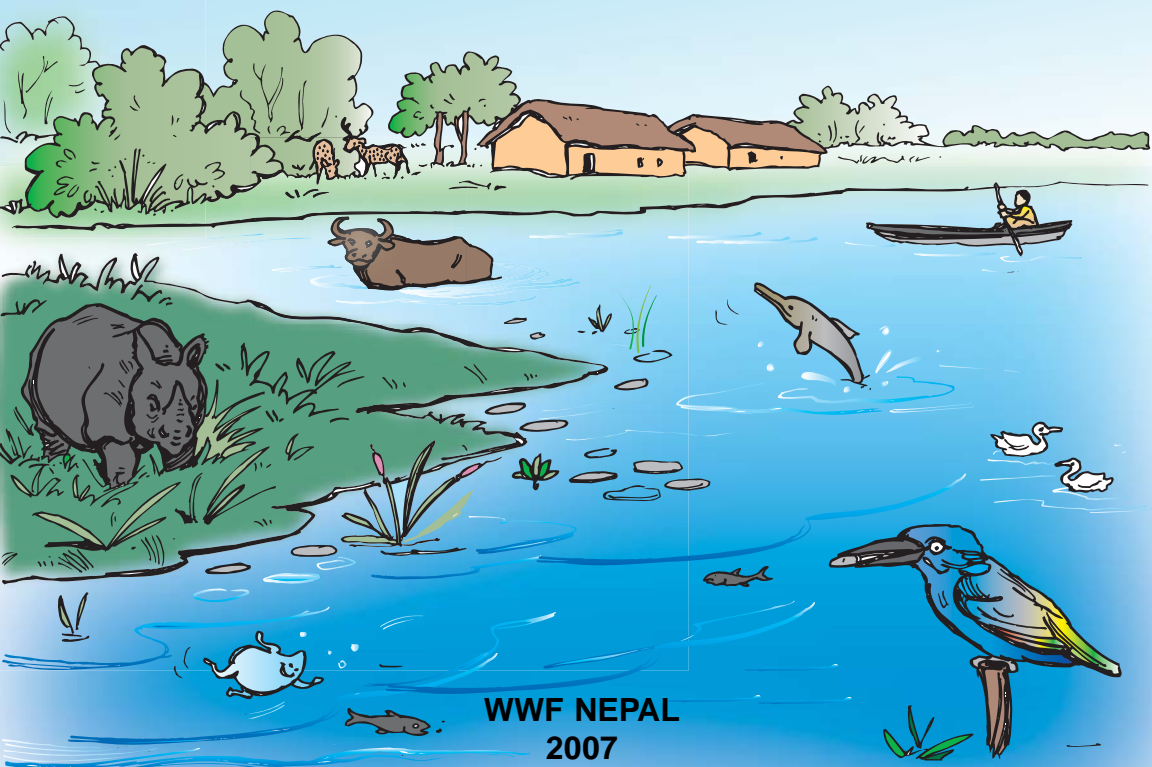




for a living planet®



The Journey of Pani Prasad



**WWF NEPAL
2007**



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2007**

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A Message for You

Dear friends,

What did you do when you woke up early in the morning? How many glasses of water did you drink today?

I am asking you these questions because you start your day by washing your face and throughout the day you use water for various purposes like drinking, bathing, washing and your parents use it for cooking, washing, cleaning, and gardening also.

When you are exhausted after a game or a tiring work, you feel thirsty and you gulp down glasses of water to quench your thirst. Have you ever imagined, what would have happened had there been no water? You can't imagine a life without water. Life is not possible without water.

To tell you the importance of water, its origin, cycle and much more, Pani Prasad will take you on a journey from Himalayas to rivers, wetlands and every home. I am sure you will learn a lot about water and its importance from Pani Prasad.

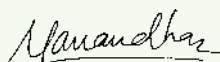
Happy journey!

At the end of the journey, I will ask you another question.

How much water will you save today?

I hope you will convey the message of Pani Prasad to your friends, parents and neighbours and be a partner in saving water.

Thank you,



Anil Manandhar
Country Representative
WWF Nepal



Words You Should Know



Pani Prasad	a character created to narrate the story on life of water; pani means water in Nepali
Cloud	a collection of water vapor in the air that you can see.
Condensation	when gas changes to a liquid, such as when clouds change from a vapor to a liquid when it rains
Conserve	to protect, to not waste
Evaporation	when liquid water changes to water vapor
Fertilizer	materials used to feed plants on farms
Flood	when water overflows onto lands not usually covered by water
Ground water	water under the Earth's surface that feeds wells and springs
Ice	water as a solid
Irrigation	controlling water to feed plants
Molecule	a small particle, a tiny bit
Pesticides	chemicals used to kill pests, especially insects
Pollution	something that has become dirty or dangerous; polluted water can be harmful to all living things
Precipitation	rain, snow, sleet, frost, etc.
Rain	water that has changed from a vapor to a liquid and falls from clouds
Reservoir	a place for storing and controlling water-can be natural or man made
Snow	water that changed from a vapor to a solid and falls from clouds
Steam	water that has turned to vapor when it is heated
Surface water	water on the surface of the Earth such as rivers, lakes, streams, and reservoirs
Wastewater	water used for washing, flushing, etc. in homes and businesses
Water cycle	the journey that water makes from the oceans to the clouds and back to the Earth again
Well	a deep hole dug in the Earth in order to bring water from under ground
Saline Water	Salty water found in oceans and lakes
Organic waste	Biodegradable waste
Inorganic waste	Non-biodegradable waste



Here arrives **Pani Prasad**



*"Namaste my dear friends!
My name is **Pani Prasad**. Today, I am here to tell you a story about myself, which I am sure you will find very interesting. But before beginning my story, I want you to answer some of my questions.*

Let's see what you know about me!

1. **The scientific symbol for water is:**
 - a. CO_2
 - b. H_2O
 - c. CH_4
2. **The natural cycle of water is called:**
 - a. The Hydrological Cycle
 - b. Percolation Cycle
 - c. Groundwater Cycle
3. **Which of the following is known as "Water Towers of Asia"?**
 - a. Major rivers in this region
 - b. Polar ice caps
 - c. The Himalayas
4. **Wetlands are ...**
 - a. useless land
 - b. land covered with water that supports lives of plants and animals
 - c. I don't know





5. **Which is called a universal solvent?**
 - a. Alcohol
 - b. Petrol
 - c. Water
6. **Most of our water is used for...**
 - a. drinking and cooking
 - b. washing utensils
 - c. sanitation and hygiene purpose such as bathing, cleaning and toilet flushing
7. **The best way to save water in our house is by:**
 - a. taking short showers
 - b. drinking juice
 - c. taking the sink out
8. **Organic waste can be better managed by:**
 - a. throwing it into rivers and ponds
 - b. composting at home
 - c. giving it to waste collectors
9. **We can help prevent water pollution by:**
 - a. disposing of chemicals properly
 - b. keeping water in a bucket
 - c. not going to the river banks and ponds
10. **The most important person you know who can help save water is:**
 - a. Pani Prasad
 - b. your mom
 - c. you

1.b 2.a 3.c 4.b 5.c 6.c 7.a 8.b 9.a 10.c

Answers:



What is Water?

After air, water is the life line of all the living beings. Some scientists believe that all life began in water.

Can you imagine your life without water?

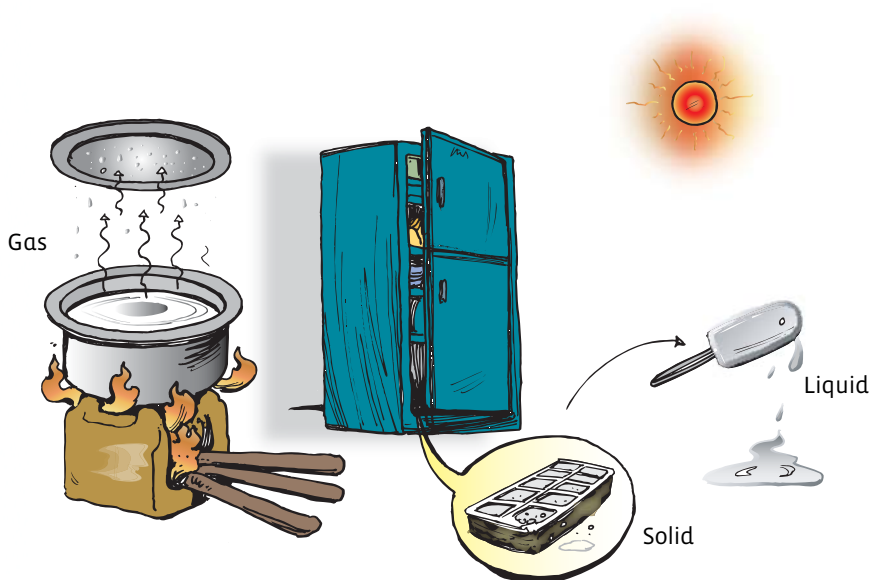
You are right; life is not possible without water.

This is why water is also termed as "wonder liquid".

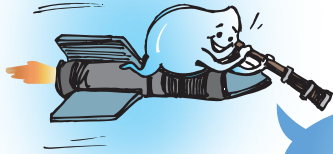


In different languages, water may be recognized by different names such as Pani (in Nepali), Jal (in Sanskrit) and so on.

In Science, water is termed as H_2O . This tells us that a water molecule is made up of two hydrogen atoms and one oxygen atom. When these atoms are heated to a high temperature, they join to form water. Water occurs naturally in three forms that people see every day- solid, liquid and gas.



Where and how much water do we have in our planet?



Why is the most part of Earth blue?

If you were in a spaceship like Pani Prasad and looked back at our planet, you would see that most of the Earth's surface is blue in color. That's because water covers 70% of the earth's surface. This is why our planet Earth is also known as the "water planet".

We obtain water mainly from three sources

- ▶ surface water sources,
- ▶ underground water sources
- ▶ rain water.

Although there is so much water on earth, the amount of freshwater available for our use is very limited. At the same time, water is not equally distributed everywhere. Seas and oceans contain vast amount of water out of the total water present on Earth. These are known as saline water source as water found in these places are salty. Freshwater can be found from surface water sources or underground water sources. Surface water sources include rivers, fountains, lakes, polar ice caps, snow caps, glaciers, and so on. Springs and wells are underground water sources.



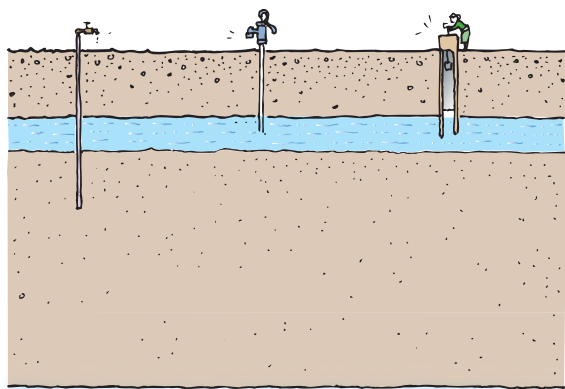
DID YOU KNOW?

- ▶ About 97.5% of the Earth's water is in the oceans and seas.
- ▶ 3.8 liters of sea water consists of about one hundred grams of salt.
- ▶ Salt from all the oceans can make a 288 km high and 1.6 km thick wall.
- ▶ Nearly 2.24% water is not available for our use as it is stored in polar ice caps, glaciers and deep ground water.
- ▶ Only 0.26% is accessible fresh water.
- ▶ The actual quantity of fresh water available is only 5,00,000 km³.

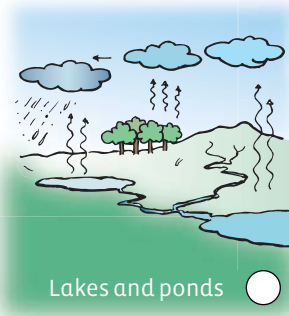




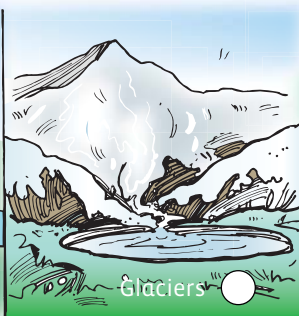
Can you indicate which of the following sources are easily available for our use?
(Indicate ✓ or ✕)



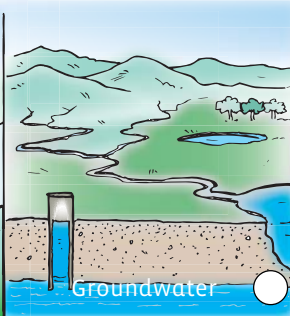
Deep Groundwater ☐



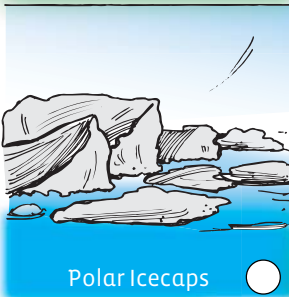
Lakes and ponds ☐



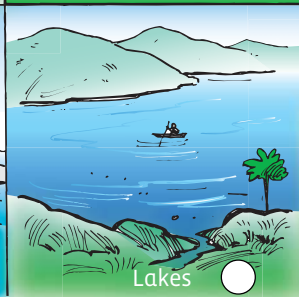
Glaciers ☐



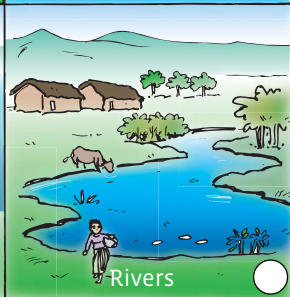
Groundwater ☐



Polar Icecaps ☐



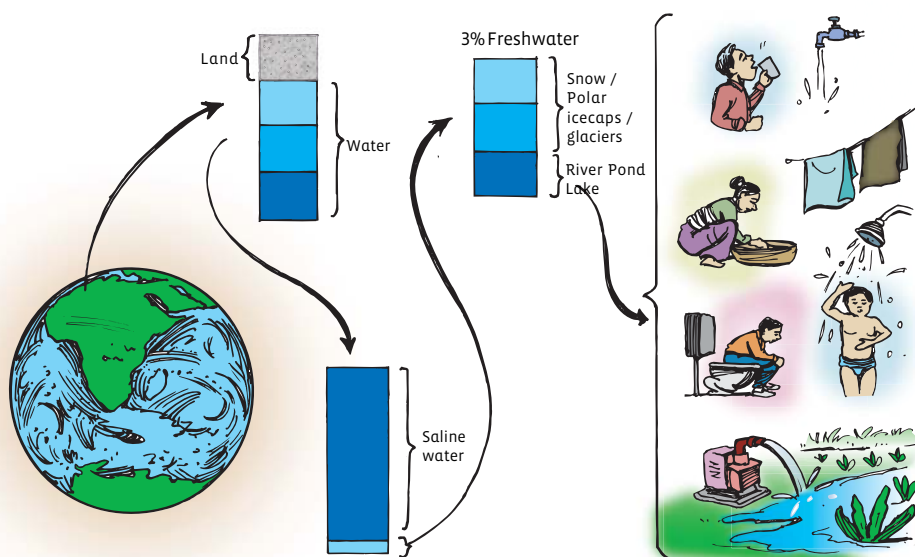
Lakes ☐



Rivers ☐

You may be thinking that we would never face any problem regarding the water availability as our earth consists of plenty of water sources. But the case is not as simple as most of the people think. As we have already known, all the water found on our Earth is not available for our use as vast amount of water present in seas and oceans is salty and therefore is not useful for us. Out of remaining of freshwater sources; most are stored in polar icecaps, glaciers and deep ground water. It is very tough to get water from these places for our use.

Now what does all this mean to us? This means that only a very small portion of freshwater in lakes, aquifers, rivers etc. are available for our use. Therefore, we must be careful about not wasting water.



I am very important to all of you. Do you know why?



Each and every living organism requires water to survive and we have water in almost all cells of our body. Water helps to run our body systems, keeps them clean by flushing waste out of the body and maintains our normal body temperature. That's why when we lose water from our body we become sick.

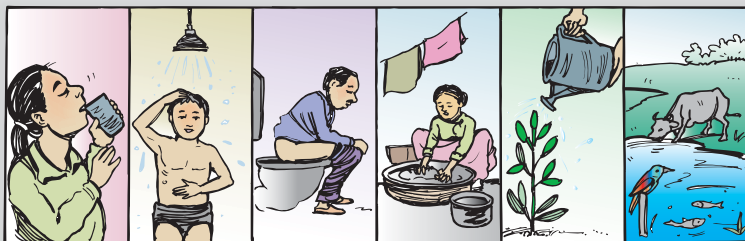
Animals and plants also need water to live. Plant needs water to make their own food.



DID YOU KNOW?

- ▶ If you lose 1% of your body's water, you feel thirsty.
- ▶ If you lose 5% of your body's water, you will have a fever.
- ▶ If you lose 10% of your body's water, you will not be able to move.
- ▶ And if you lose over 12% of your body's water, you will die

(Source: Goodman, 2003)



Use of water in our daily life

INTERESTING FACTS:

Body of the entire living organism is made up of water.



Tomatoes are
95% water



Apples are
80% water



Trees are
70% water



Human beings are
65% water



Earthworms are
80% water

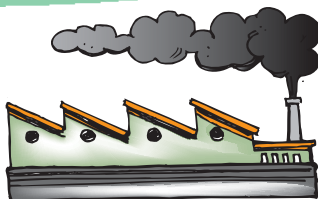
DID YOU KNOW?

- ▶ One person uses about 123 gallons of water a day!
- ▶ You are about 65% water. If you weigh 30 Kg that mean you are 20 kg of water!
- ▶ A person can live for weeks without food but can only live a few days without water.
- ▶ The water we drink is the same water that the dinosaurs drank millions of years ago.
- ▶ A person consumes about 2.4 liters of water per day from water and food to stay healthy.

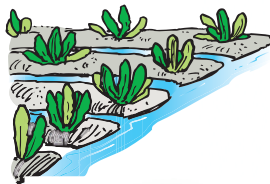
You have realized now that I am useful for supporting your life. But can you think about my other uses?



Industries cannot run without supply of water. Industries need water directly or indirectly. Can you name a few examples of industries that need a huge amount of water?



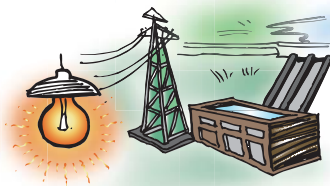
Farmers need adequate water supply to grow crops, fruits and vegetables. Did you know nearly 5,000 liters of water is required to grow a kilo of rice!



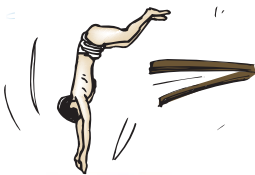
Boats and ships are used to transport goods and people from one place to another.



In many **cultures and religions**, water is essential to perform ritual activities. Can you give some examples of how water is used in your culture and tradition?



Hydro electricity is generated from rivers by making dams and reservoirs.



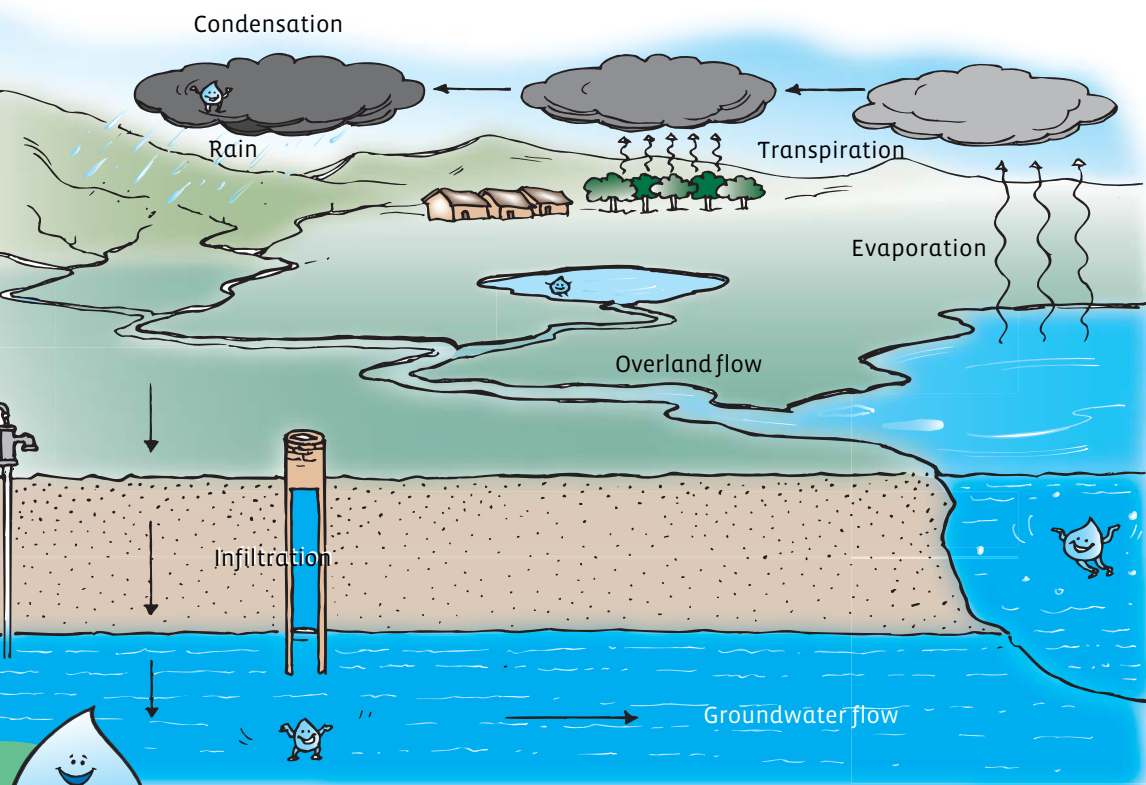
How often do you go **swimming and fishing**? These water games bring so much joy.





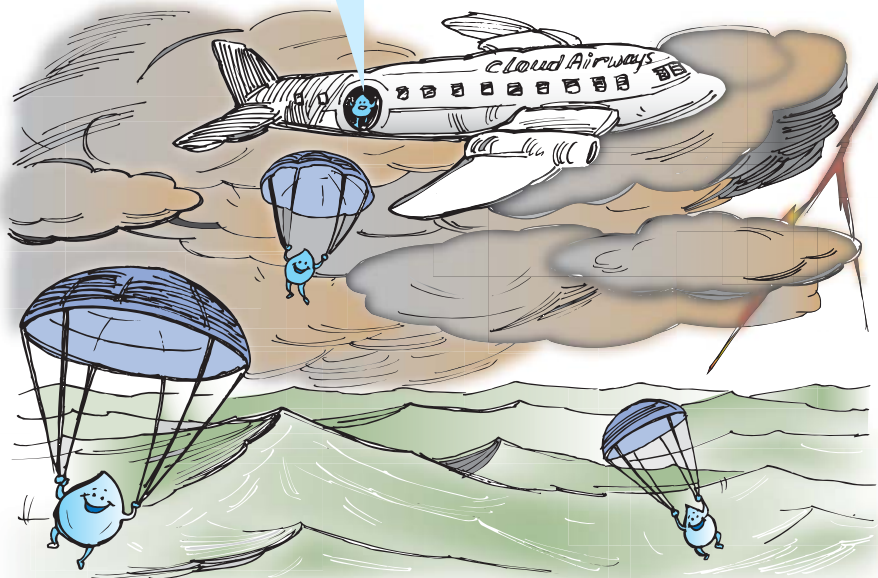
Do you know that the same water has been reused and recycled on the Earth for 4.6 billions years? There is no such thing as new water. You are using the same drops of water again and again over time. The water that you are drinking today may have been once used by dinosaurs and our ancestors.

Are you interested to know how this same water is being recycled for so many billions of years? To understand this you have to learn about the water cycle.



The Wonderful Journey of Pani Prasad in the Water Cycle

You seem to be quite excited to learn more about the water cycle. I will take you on a new journey. You are welcome on board the Cloud Airways. I am not alone here. You can see many of brothers and sisters...now its time to jump!



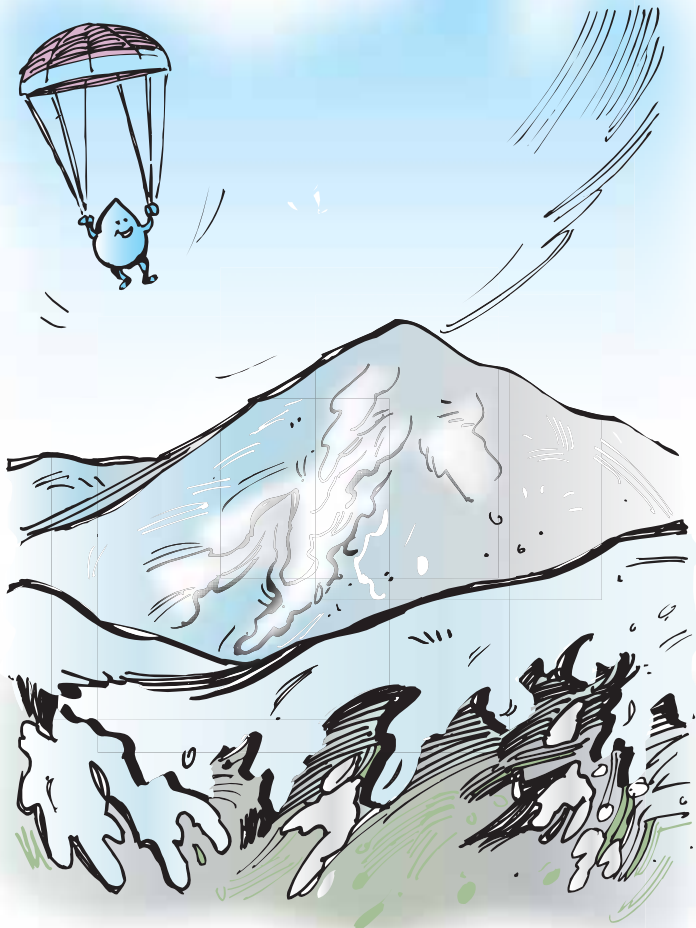
Air always contains water vapor. When the temperature becomes low, water vapor changes into clouds through condensation. In the cloud, molecules of water join together to form small droplets. When clouds pass from hot places to cold ones, these small droplets again combine to form bigger droplets and fall down on the earth due to force of gravity. This is called rain.

Pani Prasad lands in the Himalayas

In the northern part of Nepal, we find a long range of Himalayas running from east to west. Twelve mountain peaks with heights more than 8,000 m are found in Nepal which also includes the highest mountain in the world, Mt. Everest (8,848 m).

The Himalayas store vast amount of fresh water in the form of snow, glaciers and glacier lakes. When these snow and glaciers melt, they flow downstream, supplying water to the many rivers of Nepal. Billions of people living in the region depend heavily upon these rivers for water use. This is why the Himalayas are called the "Water Towers of Asia".

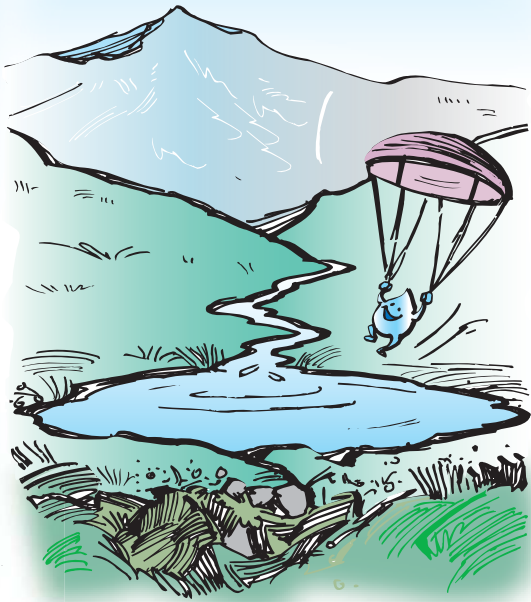
The Himalayas control the weather pattern in this region. They are also home to many unique and valuable plants and animals.



What are glaciers and glacier lakes?

A glacier is a mass of ice that slowly flows outwards from ice caps or down from above the snow line. It can be described as a slowly moving river of ice. Glaciers are found in mountain ranges and valleys of the world. They cover nearly one tenth of the Earth's land area.

When these glaciers slowly melt they form huge lakes at high altitudes. These lakes are known as glacial lakes and store billions liters of water.



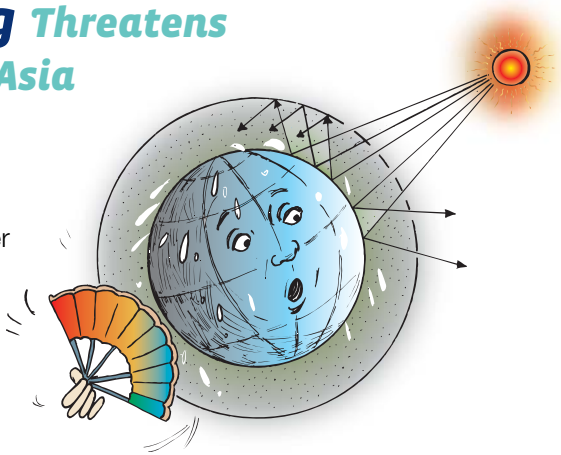
DID YOU KNOW?

- ▶ Glaciers form 70% of the world's freshwater reservoir.
- ▶ Nepal has more than 6,000 rivers and rivulets.
- ▶ Most of these rivers depend upon the Himalayas for water.
- ▶ More than 3,000 glaciers are in the region.
- ▶ About 2,323 glacier lakes are identified.



Global warming Threatens the Water Tower of Asia

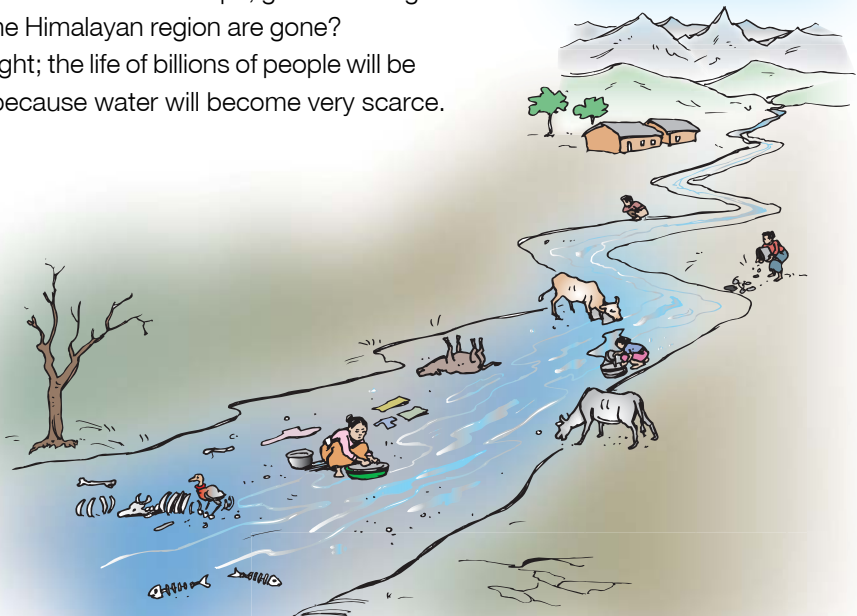
Our Earth has become hotter over the past 100 years because of global warming. Human activities are largely responsible as we use more and more greenhouse gas producing fossil fuels. This has caused the atmosphere to trap more solar radiation, causing the Earth to heat up.



The increase in temperature of Earth has a direct impact on our Himalayas. Scientists say that our mountains are melting at a faster rate than any other place.

High temperatures mean faster melting of snow and glaciers and less snow fall. Can you imagine what will happen when all the snow caps, glaciers and glaciers lakes in the Himalayan region are gone?

You are right; the life of billions of people will be at stake because water will become very scarce.



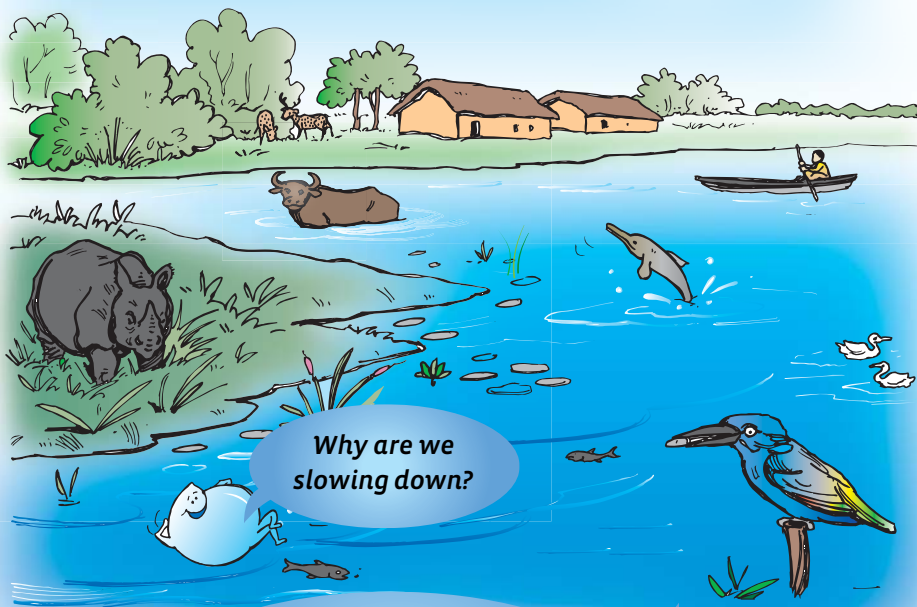
The rapid melting of glaciers and snow also increases the risk of glacier lake outburst floods (GLOFs). Glacier lakes are naturally dammed by moraines, which are natural walls of mud and stone. Glaciers melting faster means more water into the lake every year. The wall of the lake can hold up the pressure of water to a certain extent. When the moraine can no longer hold back the water, it bursts out with great force, causing devastating flood. This can destroy agriculture land, infrastructure like houses, cattle and even people.



Pani Prasad goes to the wetlands

What is a wetland?

Wetlands are any areas where water is abundant to support life of plants and animals. Can you name few wetlands? They can be man-made or natural. Water for these wetlands comes from either rain or underground sources.



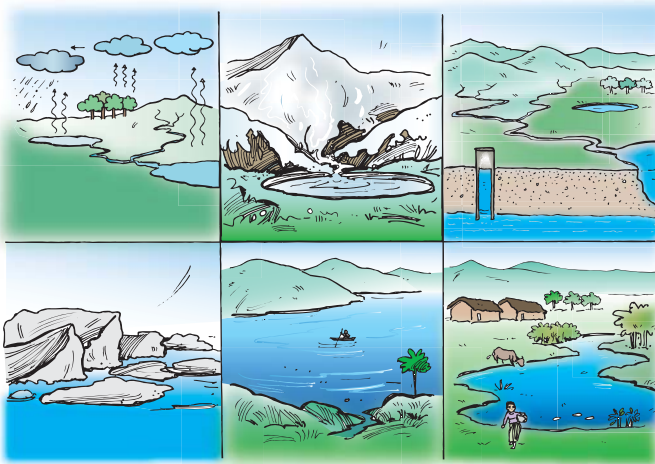
You have reached a wetland! This is an area where there is a lot of water along with different kinds of plants and wild life like me. Wetlands are nature's way of recycling water.

Wetlands in Nepal and its significance

We can find different kinds of wetlands in Nepal.

They include swamps, marshes, permanent flowing rivers, seasonal streams, lowland oxbow lakes and high altitude glacier lakes, water storage and ponds and deep water agricultural land.

- ▶ There are 27 different types of freshwater wetlands on the Earth. Nepal has 20 such types of wetlands.
- ▶ In Nepal, 91 globally -threatened plants are found, of which 11 are dependent on wetlands.
- ▶ Nepal has 859 bird species, of which 193 cannot live without wetlands.

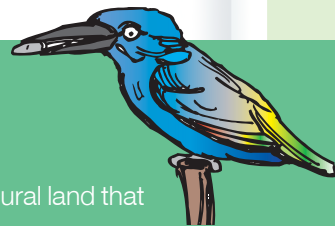


Types of Wetlands

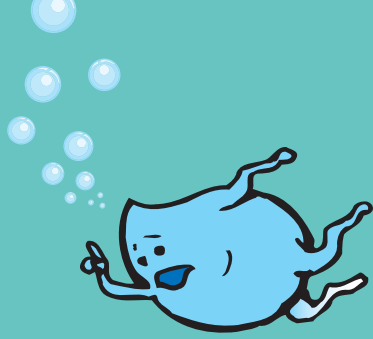
OUR WETLANDS ARE IN DANGER!

Some activities that put wetlands in danger:

- ▶ Over-use of chemical fertilizers and pesticides in agricultural land that affects wetlands.
- ▶ Unsustainable fishing through chemical poisoning and electrocution.
- ▶ Dumping of waste and sewage into wetlands.
- ▶ Changing wetlands for agriculture and other uses.
- ▶ Over-harvesting of fuel wood, fodder and timber.
- ▶ Poaching of endangered species.
- ▶ Overgrazing.
- ▶ Construction work such as roads and buildings.
- ▶ Human pressure from recreation and religious travel..



IMPORTANCE OF WETLANDS



Hydrological Value:

- ▶ Source of water for drinking, irrigation and other uses.
- ▶ Supply water for rivers, streams and ground water recharge.
- ▶ Act as natural sponges to purify water.
- ▶ Also helpful for flood control and sediment trapping.

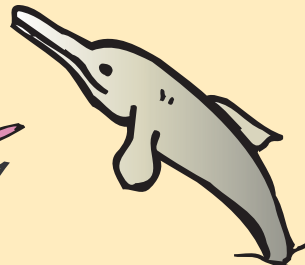
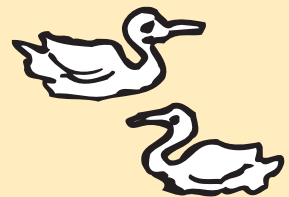
Biological Value:

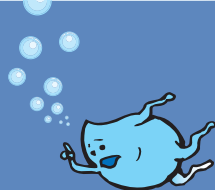
- ▶ Home of many valuable plants, birds, animals. Rare river dolphin found in Karnali, Koshi and Narayani Rivers.
- ▶ Habitat for many migratory and residential birds.
- ▶ Fish stock of world.
- ▶ Good source of fuel wood and fodder.



Socio-cultural and religious value:

- ▶ A pleasant place to have a picnic, fish, bathe and swim.
- ▶ Many temples and pilgrims are located near wetlands like Gosaikunda, Devghat, Barah Chhetra and so on. For example, every year thousands of people from Nepal and India visit Gosaikunda to celebrate Janai Purnima.
- ▶ Tourist attraction, sightseeing and recreational activities.





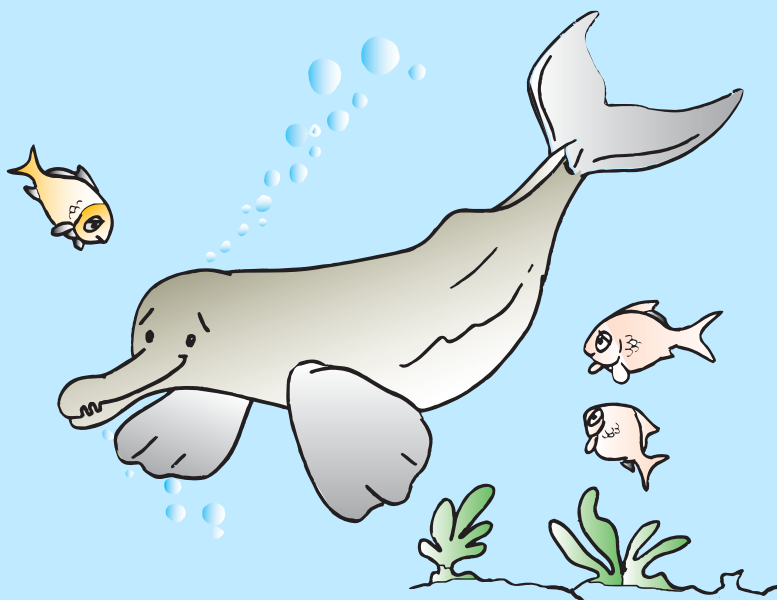
SAVE OUR RIVER DOLPHINS

You may be surprised to know that dolphins live in rivers too. Of seven dolphin species found worldwide, four live in fresh water.

The Gangetic River dolphins are found in the Koshi, Narayani, Karnali and Mahakali rivers of Nepal. The same species of dolphins are also found in the Ganga, Brahmaputra and Meghna rivers of India, and the Karnafuli, Sanghu rivers of Bangladesh.

Some facts about dolphins in Nepal

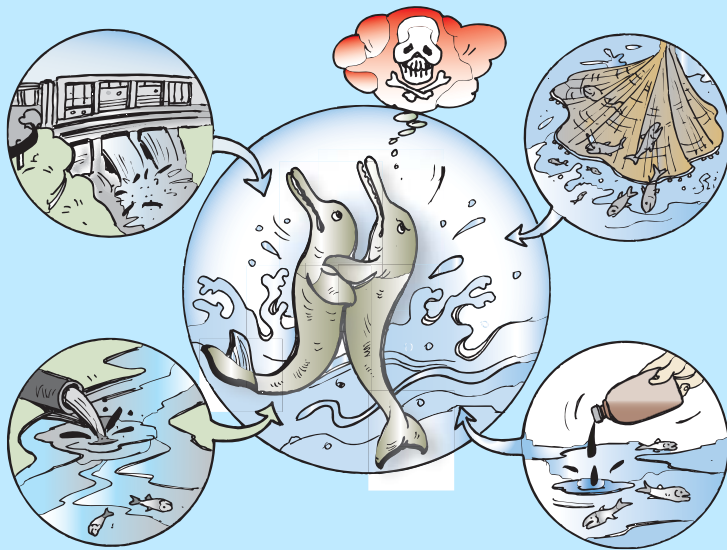
- ▶ Locally these dolphins are known as Susu.
- ▶ The scientific name is *Platanista gangetica*.
- ▶ They are mammals which give birth to their young ones.
- ▶ They live in deeper part of rivers as well as in confluence of two rivers.
- ▶ They are indicators of the health of our rivers.
- ▶ It is the only water mammal that is protected under Nepal law.
- ▶ Dolphins are a tourist attraction.



Why are dolphins in danger?

The number of dolphins are decreasing because of loss of their home and food.

- ▶ People are using poisons and huge nets to catch fishes, which deplete food for dolphins.
- ▶ The construction of dams, dykes for irrigation, hydropower and flood control mechanisms has disturbed the natural movement of dolphins.
- ▶ Pesticides and fertilizers used in agriculture land leach to rivers, threatening the life and food of dolphins.
- ▶ Direct discharge of industrial waste without any treatment into rivers.
- ▶ Disturbance to natural environment of river by haphazard sand, gravel and stone mining.



What can you do to save dolphins?

- ▶ Stop fishing using poisons and large nets.
- ▶ Use compost manure in agriculture land.
- ▶ Plant trees and save forests to stop soil erosion.

Take **action** to save our Susu.

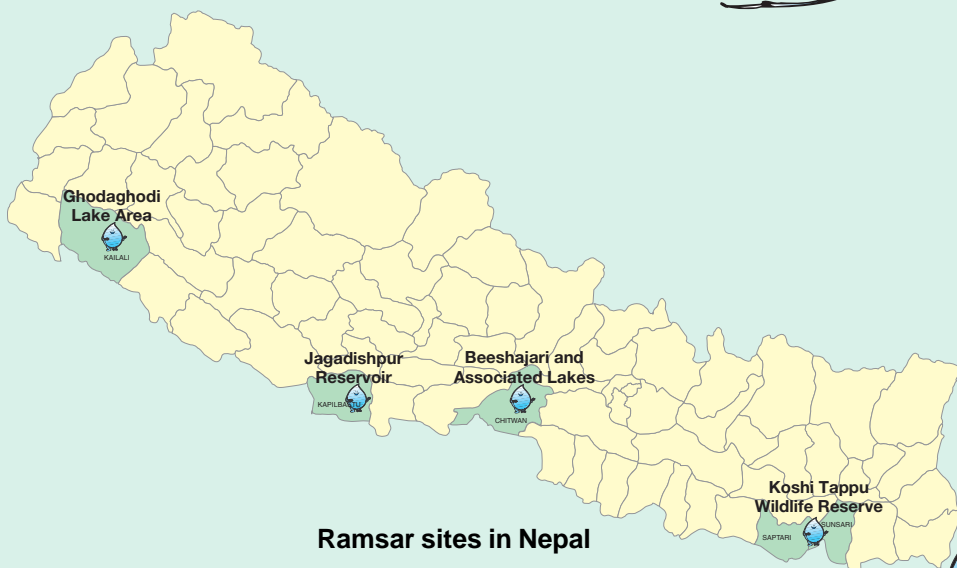
THE RAMSAR CONVENTION ON WETLANDS

To conserve ecologically significant wetlands throughout the world, national level actions and international cooperation are needed. To achieve this, an international meeting was organized in the city of Ramsar of Iran in 1971. This meeting adopted the Ramsar Convention on Wetlands and came into force in 1975. It is an intergovernmental agreement to work together for conservation of wetlands. Under this convention, "List of Wetlands of International Importance" has been prepared to designate various wetlands scattered throughout the world as wetlands of immense importance.



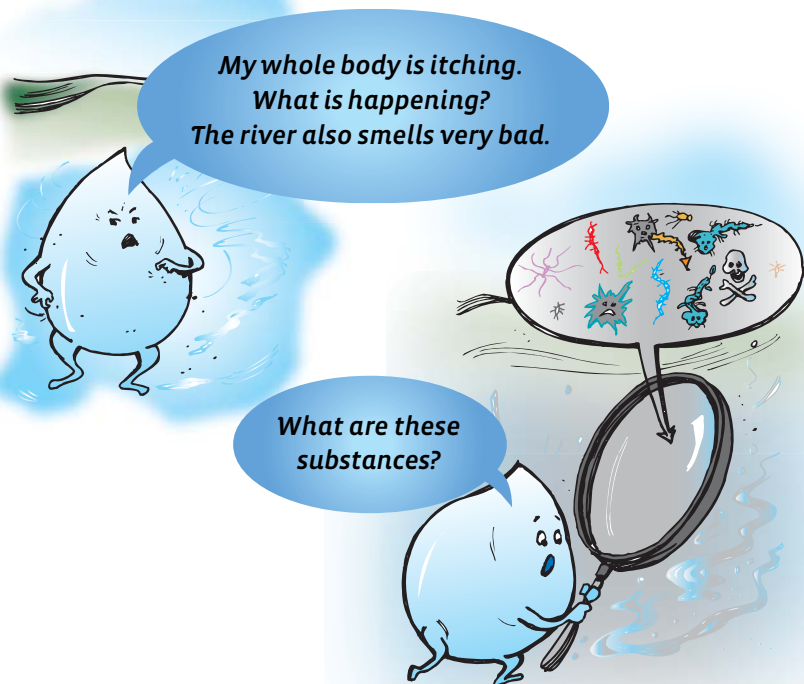
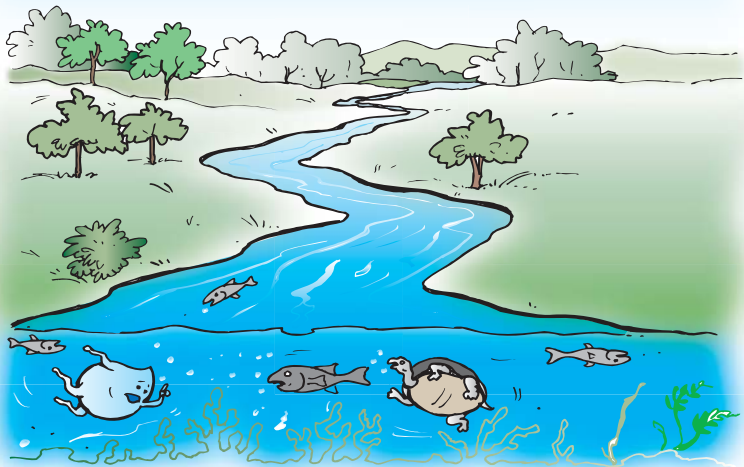
Nepal is also a member country of the Ramsar Convention on Wetlands. Presently, four sites in Nepal have been included in the list of wetlands of international importance. They are as follows:

- ▶ Koshi Tappu Wildlife Reserve
- ▶ Beeshajari and Associated Lakes
- ▶ Jagdishpur Reservoir
- ▶ Ghodaghodi Lake

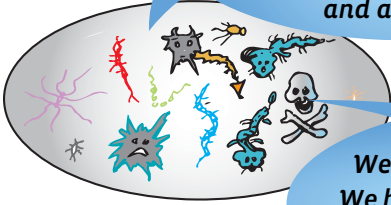


Ramsar sites in Nepal

Pani Prasad at risk: Water pollutants

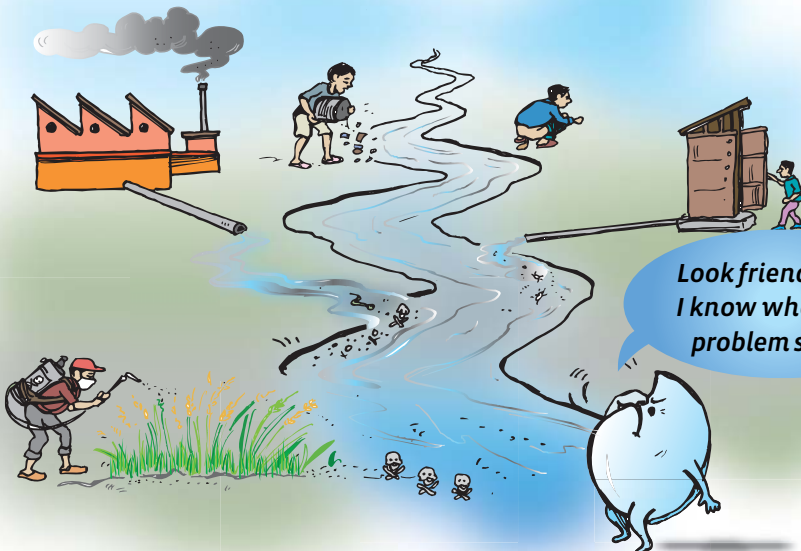


We are living organisms known as germs and we are invisible to naked eyes. We cause different diseases in humans, plants and animals.



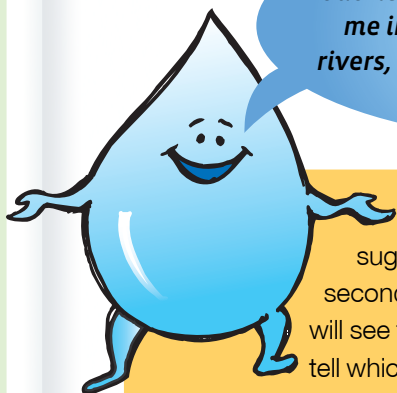
We are dangerous chemicals. We have the power to kill living organisms when we enter their body.

These are not our friends! I wonder how they got here? Let's find out together.



Look friend! Now, I know where the problem starts.

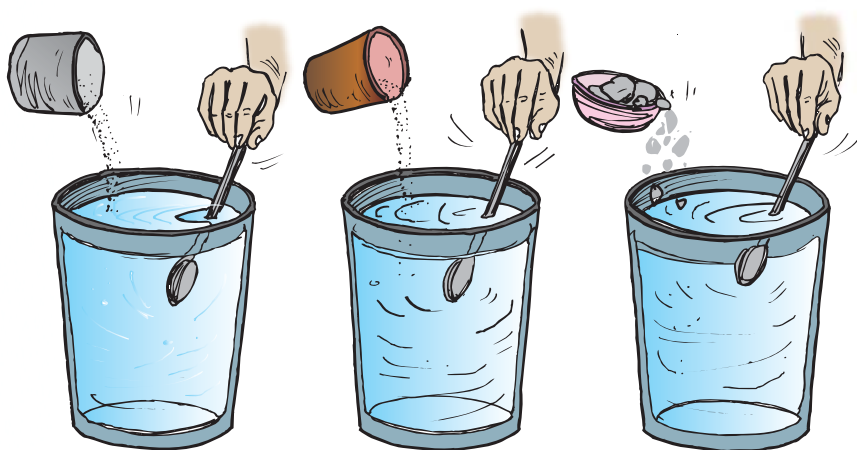
In my natural state, I am colorless, odorless and tasteless. But you can't find me in a pure form in the rain, springs, rivers, the sea or wells. Do you know why? To find out, let's do an activity.



Take three glasses of water. Pour a spoon of sugar into the first one, a spoon of salt into the second and mud into the third one. Stir the glasses. You will see that the salt and sugar has disappeared. Can you tell which glass contains sugar? To find out, you have to taste it. However, you can easily distinguish the glass that contains mud as it is insoluble in water and the colour is brown.

Like sugar and salt, there are many others substances and gases which dissolve in water. For this reason water is called a **universal solvent**.

A river dissolves soluble substances and carries insoluble materials such as mud and wood in the form of suspended impurities. Rain water is considered the purest form of water, but initial showers may contain dissolved gas present in the atmosphere like oxygen, carbon dioxide, oxides of nitrogen and suspended microbes.

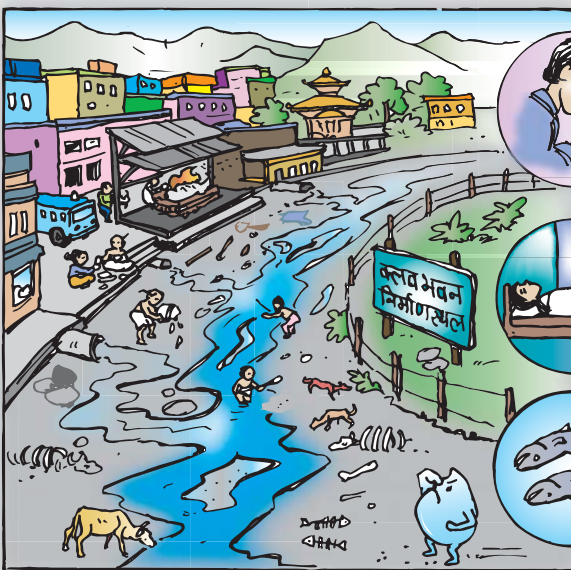


Effects of water pollution



Can you find five differences between the two pictures below?

Before



After



Story Time



SANUMAIYA'S STORY

Namaste!

My name is Sanumaiya. I am 13-years-old and live with my mother, father and brothers in a farm in Baglung.

Water is a very important part of my duties at home. Everyday I have to fetch water from a stream nearly 3km away. Since I have to do this before school, I have to get up very early. The stream is small one and the water has to be scooped with a small bowl. As you can imagine, it takes quite a long time to fill two *gagros*.

In order to finish all my chores at home, I have to wake up really early and I sometimes feel almost too tired to go to school. After fetching water, which is used for drinking, cooking, and cleaning, I have to rush off for classes. I'm always in a hurry to get to school and it takes nearly an hour-and-a-half hours of walking to get there. I don't like getting scolded by teacher when I am late.

Even if we had a tap or well at home, I would never waste water. We should not waste a single drop because water is life.

MORE EXPENSIVE THAN GOLD!

Namaste!

My name is Hari Bahadur Shrestha and my family has lived in Makhan Tole for more than 100 years. This historic neighborhood in Kathmandu used to get its water from an ancient *dhunge dhara*, stone taps. My family also relied on this source, which was connected to the Water Supply Corporation about 20 years ago. In those days we never had a problem getting water but today, it's a different story.

The only time we have some water in our taps is during the monsoon but that is neither regular nor reliable. At night we stay alert in case the water comes and then we have to fill buckets and *gagros*. In the dry seasons, the water totally dries up.

Many stone taps are also drying. In Kathmandu you can see long lines of people waiting to fill water. My wife often spends a whole morning waiting for her turn to bring water home. When I was young, I never imagined that something as easily available as water would become so scarce. Now I think water is more expensive than gold.

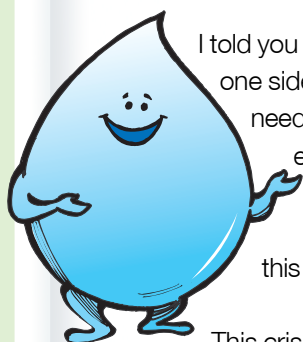


Write three lessons you have learned from the stories.

1

2

3



I told you these stories to help you realize that water pollution is only one side of the coin. Water scarcity is also a serious concern that needs our equal attention. Today billions of people don't have enough water. With a growing population, this will be more problematic in the days to come. Useable water on Earth is very limited but people still misuse, waste and degrade this precious resource.

This crisis needs your immediate action to make the best use of the little water we have. Start to respect and value water. This can start right at home and community level.

DID YOU KNOW?

- ▶ By the mid-1990s, 80 countries that are home to 40% of the world's population, faced serious water shortages. The worst affected area were Africa and the Middle East.
- ▶ By 2025, two-thirds of the world's people will face water stress. The global demand for water will have grown by over 40%.



Are you **Pani Prasad's** friend?

TEST FOR YOURSELF

(Tick your answer with a pencil)

1. The tap is running when I brush my teeth.

A. Usually

B. Rarely

C. Never



2. I see a leaking tap and...

A. ask someone to fix it

B. ignore it

C. fix it myself



3. I enjoy long baths and showers.

A. Always

B. Sometimes

C. Never

4. A big toilet flush is important.

A. True

B. Somewhat true

C. Untrue



5. I flush many times to get a clean toilet.

A. Never

B. Sometimes

C. Always

6. When I see my friends brushing or washing with the tap running, I...

A. Ignore it

B. Fill a mug

C. Turn off the taps

7. Rain water can be used for watering plants and laundry.

A. True

B. False

C. Don't know

8. The trash from my house is...

A. thrown on a trash heap usually near a road, street, or riverbank

B. taken by garbage collectors

C. composted to reduce organic waste



9. I participate in community clean-up programs...

- A. Never, it's not important to me
- B. Sometimes, although it's not much
- C. Regularly because it is my responsibility

10. When polluters contaminate water sources with raw waste, I...

- A. Ignore it, it's not a concern
- B. Feel helpless, I can't do anything
- C. Protest against bad practices

MARKS TABLE FOR YOUR ANSWERS

*Write your total
mark?
What does it mean?*

Questions No.	A	B	C
1	0	5	10
2	10	0	5
3	0	5	10
4	0	5	10
5	10	5	0
6	0	5	10
7	10	0	0
8	0	5	10
9	0	5	10
10	0	5	10

HOW YOU SCORED:

- ▶ 80-100 Marks -Congratulations! You are very water friendly. Keep it up and tell others to follow your example.
- ▶ 60-80 Marks - Good! You are conscious about the importance of water but you need to practice more to water awareness.
- ▶ Below 60 Marks -I am very sorry to say that you are neglecting the value of water. Please read the following pages carefully and try to follow what you learn. Best of luck to you.



Your water use?

To start water-friendly practices at your home and community, it is necessary to first know the amount of water being used for different purposes. Have you ever tried to calculate the amount of water used at your home, class and community?

Let's try this out!

Your activities	Amount of water in liters
Brushing teeth	
Cooking and cleaning	
Laundry	
Drinking	
Bathing	
Total daily use	

Daily use!

Class

(multiply your daily water use with total number of classmates)

Community

(multiply your daily water use with total number of people in your society)

Country

(multiply your daily water use with total number of people in your country)

Have you finished your calculations? Here is a similar chart that will give you an idea about how much water you use daily.

Quantities and different uses of drinking water for fully plumbed house				
Purpose of use	Amount (liters/ person/day)	Quality required	Generally we use	Remarks
Drinking and cooking	3	Highest quality	Highest quality	Best choice
Dish washing	10	High quality	Same water	Good choice
Bathing	57	High quality	Same water	Good choice
Laundry	20	High quality	Same water	Good choice
Cleaning	7	Low quality	Same water	Bad choice
Gardening	3	Low quality	Same water	Luxury choice
Toilet flushing	45	Lowest quality	Same water	Luxury choice

From the above table, you know:

- ▶ Only 2% of water of highest quality is needed for drinking and cooking purpose.
- ▶ Remaining 98% is used for sanitation and hygiene.
- ▶ We use the same quality of water for every purpose, which is a misuse of water.
- ▶ We are wasting 45 liters of highest quality water to flush out our toilets.



The white elephant that consumes our precious water

Now close your eyes! Recall incidents where you have knowingly or unknowingly wasted a lot of water. Here are some areas that you are wasting water:

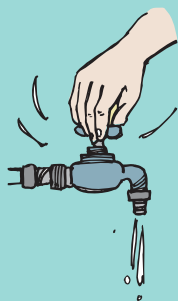
- ▶ Flush toilets too often to clean it.
- ▶ Enjoy bathing in full tubs.
- ▶ Leave the shower or tap running while brushing or washing.
- ▶ Clean your car on floor with a hose.
- ▶ Water the garden with tap water in the afternoon.
- ▶ Don't repair the leaky taps.





What you can do to save water?

AT HOME



- ▶ Don't let the tap run when you brush your teeth or wash. Use a mug.
- ▶ Put up a sign to remind your family to turn the tap off when they brush.
- ▶ Regularly look for leaks in water the water pipe and taps and get them fixed.
- ▶ Take short showers. Install a low-flow shower and avoid using a bath tub.
- ▶ Collect rain water to use in the garden and cleaning outdoors.
- ▶ Wash clothes and utensils in a bucket. Reuse the water during washing of clothes and utensils.
- ▶ Don't use your toilet as a wastepaper basket. It has its purpose, and uses it for that only.
- ▶ Do not flush the toilet unnecessarily. Put sand filled bottles or bricks inside the cistern and use smaller cisterns.
- ▶ Use a broom to clean your drive way or sidewalk.



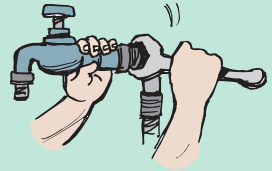
AT SCHOOL

- ▶ Tell your teacher if taps are leaking. Explain to them that the water lost is costing them money!
- ▶ Clean the water storage tank regularly.
- ▶ Tell your friends about wise use of water.
- ▶ Ask your school to install rain water harvesting.



IN YOUR NEIGHBOURHOOD

- ▶ Educate your community about good practices for water use.
- ▶ Identify leaks in main water pipes and fix them.
- ▶ Participate in community clean ups of water bodies.



INTERESTING FACTS

- ▶ A low-flow showerhead saves between 200-300 liters a month. Cutting one minute from your shower time will save an additional 250 liters of a month.
- ▶ Putting a brick into the toilet will save 3 to 7 liters per person per day.
- ▶ Fixing a leaking toilet can save 70 liters a month.
- ▶ Fixing a dripping tap can save up to 200 liters a month.
- ▶ Turning the tap off while you brush saves a liter of water every time.



WHAT YOU CAN DO STOP WATER POLLUTION?

- ▶ If you have a stream near your house, keep the banks clean.
- ▶ Don't leave any trash behind when you visit lakes and rivers.
- ▶ Animal waste can pollute water. Don't leave your pet's wastes near streams.
- ▶ Don't pour chemicals down the drain or on the ground.
- ▶ Don't pour chemicals down the storm sewer.
- ▶ Use soaps and detergents carefully.
- ▶ Raise your voice against industries and others who drain waste water into water bodies without any treatment.
- ▶ Tell your parents to stop the sewer from your home going out into rivers.
- ▶ Regularly organize community cleanups at water bodies.
- ▶ Compost kitchen waste. Adopt the 3R's (Reduce, Reuse and Recycle) principle.



Use rain water

Where does water go when it rains? It probably falls from your roof directly into a drain heading towards river near your home. Think for a moment what would happen if you could catch rain?

Collected rain water can be used for various purpose like cleaning, washing and watering the garden. After necessary treatment rain water can even be used for drinking and cooking. Rain is considered the cleanest naturally occurring water available.

The system of harvesting rainwater is very simple and cheap; it just needs effort and innovativeness. Rain water can be collected by either a drain pipe attached to roofs or containers and buckets placed directly under the roof.



THINGS TO REMEMBER

- ▶ Make sure that the roofs or place, on which rain water falls is clean.
- ▶ It is always safe to drain the first shower of rain as it may be contaminated with germs and harmful substance present in air or the ground.
- ▶ Apply appropriate water treatment method if you want it to use for cooking, drinking and cleaning utensils.
- ▶ You can directly use rain water for washing clothes, cars and floors.
- ▶ Some rain water should be allowed to enter the ground through a common point. This helps to recharge ground water and raise the water table.
- ▶ The roof of a house made on 2.5 aana of land can collect 1,00,000 liters of rain water in a month.



Turn your trash into cash



What do you do with waste produced at home? Throwing it into rivers, ponds, roads, streets and so on is not a good way for managing your waste. Most people think it's okay to throw their waste into rivers. You can help to solve the pollution problem by managing waste at home.

The major portion of waste from your house is organic in nature. This means that they decompose after a certain time. Left-over food, vegetables and fruit wastes easily become compost. A composting bin can be made at home from old plastic buckets or barrels by poking holes on them for aeration. You can also buy a readymade composting bin. Compost also can be made either in a small pit dug by piling above the ground.

You can earn money by selling paper, bottles and scrap metal. You should always try to reuse and recycle the waste. For instance you can put drinking water in an empty soft drink pet bottle, which would otherwise be discarded. Our topmost priority should be on producing as less waste as possible.





REDUCE WASTE

- ▶ Put organic and inorganic waste into separate bins.
- ▶ Say no to all plastic bags. Use cloth bags or paper bags for shopping.
- ▶ Avoid buying excessively packaged items.
- ▶ Don't throw waste in public places like on roads.
- ▶ Always practice composting at home.
- ▶ Sell inorganic waste such as paper and metals.
- ▶ Practice 3Rs; Reduce, Reuse and Recycle.
- ▶ Aware others on waste management.



We have now come to an end of my journey. Here are a few important lessons to remember.

- ▶ *There is no 'new' water.*
- ▶ *We have to use water wisely.*
- ▶ *Your actions can help to save this precious resource.*



WWF is the world's largest and most experienced independent conservation organization, with almost 5 million supporters and a global network active in more than 90 countries.

WWF's Mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature by:

- Conserving the world's biological diversity;
- Ensuring that the use of renewable natural resources is sustainable; and
- Reducing pollution and wasteful consumption

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