

July 2007

GobarTimes

Green Schools Network

ACTIVITY SHEET

Why talk about fresh water?



Water experts estimate that there is no more fresh water on earth than there was 2,000 years ago — when population was three percent of its current size. Nearly half a billion people around the world in 31 countries — mostly in the Middle East and Africa — currently face water shortages. By 2025, the number will increase fivefold to 2.8 billion people — 35 percent of the world's projected total population of eight billion people. In 2025, another 17 countries, including Ethiopia, India, Kenya, Nigeria, and Peru, will be pushed onto the list of countries likely to run short of water. China and Pakistan are also expected to be approaching water stress.

Name.....

School Name

Class..... Date.....

Gobar Gyan:

Water is one of the most amazing substances on our planet. Did you know that every single living thing needs water? It is in each of the cells in our bodies and in the bodies of all plants, animals and other creatures. Water is special because it can mix with many different liquids and solids. Its ability to stay warm for a long time makes it special too. This helps keep the temperature inside our bodies around 98 degree Fahrenheit. It also helps keep the temperature in oceans, lakes and rivers from changing very quickly.

Activity: If you can answer the questions given below you can find out the per capita water consumption in your house:

1. **How many individuals stay in your home?**

2. **What is the capacity of the storage tank/s in your home?**

Note: You can ascertain the quantity of water used in a calibrated tank by measuring the fall of water level (Consult your parents)

If water in your house comes from a common tank than you can find out the per capita consumption of fresh water by assessing different uses.

You will have to take a calibrated container like a 20 or 30 litre bucket.

For usage of water directly from the tap you will have to ascertain the flow by pouring it into calibrated buckets and multiplying it with the time for which the tap flows. This exercise will help you derive and approximate quantity for each use. Different uses could be bathing, washing, cleaning etc.



*Hi! I am Pandit Gobar Ganesh.
You will find me in Gobar Times—a magazine
that tells you how your everyday life is linked to the
world around you. Hooked, huh? If you want to know
more about me and GobarTimes visit us at
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3. *What is the per capita water consumption in your house?*

Remember! Divide the total quantity of water consumed by total number of individuals living in your house.

4. *What are the sources of water in your house?*

Remember! Consult your parents or and the estate manager of your area.

5. *Identify different uses of water and their quantities.*



Remember! Consult your family members and people who work in your house.

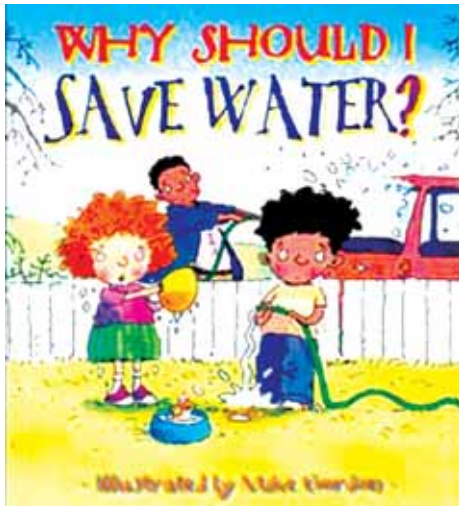
6. *Identify the approximate quantity of water you can save in each use.*

Remember! Consult your family members and people who work in your house.

7. *List down the changes you plan to introduce to save water.*

Remember! Like replacing leaking tanks, taps, pipes or any other way you plan to save water.

After 15 days answer the first five questions again to find out how much water you have saved and write about your experience and savings to Panditji by email at panditji@cseindia.org. We shall publish your story of saving water in Gobar Times a monthly supplement of Down To Earth magazine.



1. *How many individuals stay in your home?*

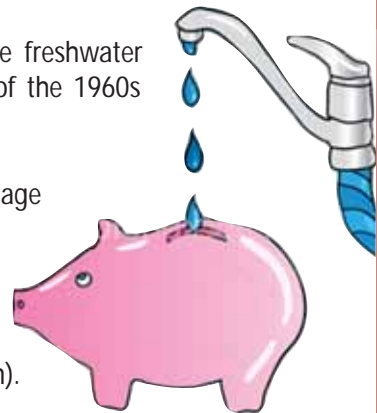
2. *How much water is used in your home?*

3. *What is the per capita water consumption in your house?*

Global "Blue Revolution" to conserve water supplies

Water and environment experts call for a global "Blue Revolution" to conserve and manage freshwater supplies in the face of growing demand and increased pollution, as the "Green Revolution" of the 1960s sought to transform agriculture.

- agriculture uses the largest amount of freshwater (70%)
- 40 percent of the world grain harvest is produced on irrigated land, therefore, a water shortage will become a food shortage.
- Countries are importing grain as a way to import water. It takes 1000 tons of water to grow one ton of grain. On the other hand, exporters of grain are exporting water.
- Producing one ton of grain requires 1000 tons of water, but producing one ton of beef requires 15,000 tons of water, (and nearly that much is required to produce a ton of cotton). Producing wheat or soybeans requires only 2% of the water required by beef.



4. *What are the sources of water in your house?*

5. *Identify uses where you saved water.*

Interesting websites — Google search keywords: fresh water scarcity

<http://www.imasar.com/elmosa/shortage.htm>
<http://www.webofcreation.org/Earth%20Problems/water.htm>



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 Activity Sheet, Centre for Science and Environment, 41 Tughlakabad Institutional Area,
 New Delhi-110062 or Call 29955124 Extension 219