

# Rain water treatment

## Activity

### Background

This activity will help students understand that rainwater harvested from the roofs of homes/schools can get contaminated with fallen leaves / other filth on the roof. This water thus requires to be filtered prior to its storage, else it would become unfit for consumption.

### Methodology

- Let the students take three flower pots and place a sieve/ wire mesh with large holes over the first flower pot and a sieve/ wire mesh with smaller holes over the second flower pot.
- Ask them to put layers of gravel, pebbles and sand into the third flower pot.
- Ask the students to take a bucket with some water and add mud, paper pieces, fallen leaves, sand, plastic and bits of cloth into it.
- Now let the students place the first flower pot in the stand and place a vessel under it.
- Let them pour the water through the first filter and collect the water in the vessel (ask students to keep aside a small representative sample for later use).
- Let them examine the water and note down which of the added solids are still present in the water (ask students to keep aside a small representative sample for later use).
- The collected water should be passed through the second pot and the procedure repeated.
- Filtered water collected following step 7 should be passed through the third pot (here again ask students to keep aside a small representative sample for later use)
- The water which is filtered through the last filter must be compared with the original contaminated water and also with representative samples of the water obtained from the first and second filters.
- Ask students to note the difference in the representative water samples kept aside after steps 5, 6, 7 with the water sample they obtain after step 9. Ask them to discuss and bring out the differences.

### Objective

To understand usefulness of filters in purifying harvested water.

### Place

Classroom

### Duration

30 minutes

### Group size

Entire class

### Materials

3 flower pots,  
Wire or mesh with large holes and one with small holes, bucket, tripod, gravel, pebble, coarse and fine sand, a vessel

### Curricular Linkages

#### Subject

Social Science/ Science

#### Concept

Waste water treatment

